TA-FB720R/FB820R

SERVICE MANUAL

AEP Model

Photo : TA-FB820R

SPECIFICATIONS

Amplifier section

DIN power output
TA-FB820R: 100 W + 100 W (4 ohms at 1 kHz)
65 W + 65 W (8 ohms at 1 kHz)
TA-FB720R: 90 W + 90 W (4 ohms at 1 kHz)
60 W + 60 W (8 ohms at 1 kHz)

Total harmonic distortion
Less than 0.008% (at 10 W output)

Frequency response
PHONO (20 Hz - 20 kHz): RIAA equalization curve ±0.5 dB
TUNER, CD, AUX, TAPE1/DAT, TAPE2/MD:
7 Hz - 100 kHz +3 dB

S/N (network A)
PHONO
TA-FB820R: 94 dB
TA-FB720R: 90 dB
TUNER, CD, AUX , TAPE1/DAT, TAPE2/MD:
105 dB

Output voltage / impedance
REC OUT 1, 2: 150 mV, 1 kilohm
PHONES: 10 mW (at 8 ohms)

Speakers impedance
4 - 16 ohms, 8 - 16 ohms (SPEAKERS A+B)

Damping factor
100 (8 ohms, 1 kHz)

General

System
Power amplifier: Pure-complementary SEPP OCL power amplifier with all stages directly coupled
Preamplifier: Low-noise, equalizer amplifier

Power requirements
230 V AC, 50/60 Hz

Power consumption
TA-FB820R: 180 W
TA-FB720R: 170 W

Dimensions (approx.) (w/h/d)
430 × 150 × 405 mm incl. projecting parts and controls

Mass (approx.)
TA-FB820R: 9.3 kg
TA-FB720R: 8.6 kg

Supplied accessories

- Remote commander (remote) (1) RM-S316
- Sony batteries R6 (size-AA) (2)

Design and specifications are subject to change without notice.

INTEGRATED STEREO AMPLIFIER

MICROFILM

SONY®

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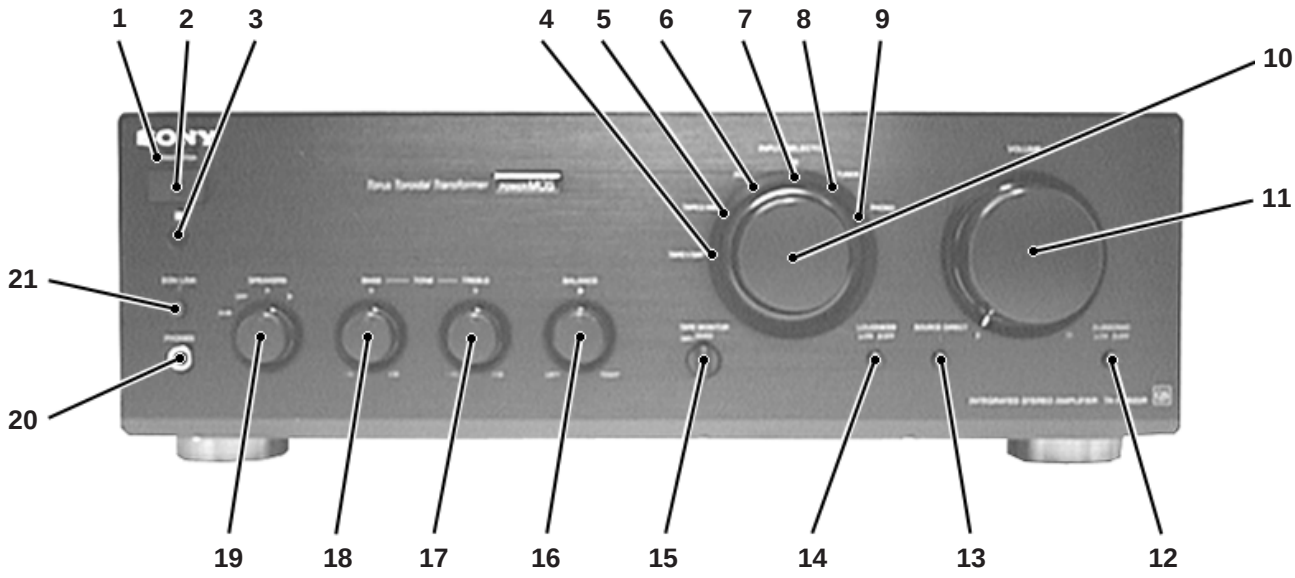
SAFETY-RELATED COMPONENT WARNING !!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

SECTION 1
GENERAL

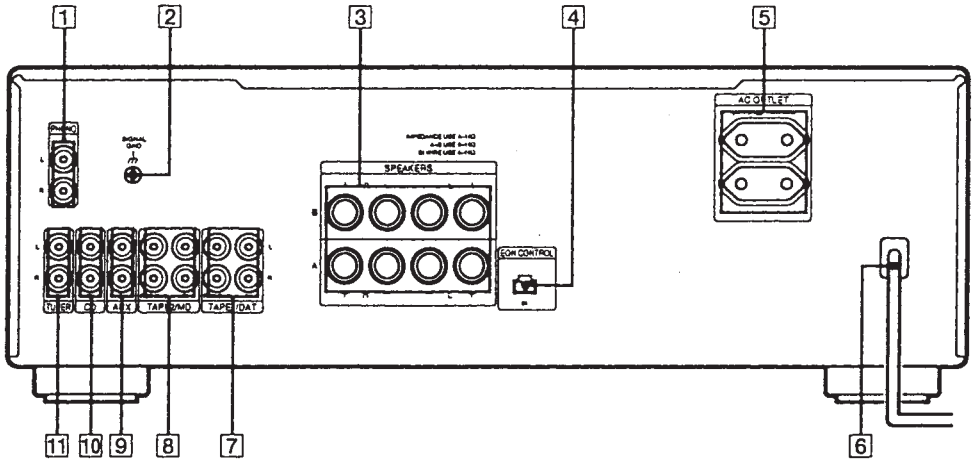
Front Panel Descriptions



1 PROTECTION indicator
2 ⏻ (Power) button
3 Remote sensor
4 TAPE 1/DAT indicator
5 TAPE 2/MD indicator
6 AUX indicator
7 CD indicator
8 TUNER indicator
9 PHONO indicator
10 INPUT SELECTOR knob
11 VOLUME knob
12 SUBSONIC button
13 SOURCE DIRECT button and indicator
14 LOUDNESS button
15 TAPE MONITOR knob
16 BALANCE knob
17 TREBLE knob
18 BASS knob
19 SPEAKERS knob
20 PHONE jack
21 EON LINK button

This section is extracted from instruction manual.

Rear Panel Descriptions



1 PHONO
2 ⏚ (SIGNAL GND)
3 SPEAKERS A/B
4 EON CONTROL IN
5 AC OUTLET
6 Mains lead
7 TAPE1/DAT
8 TAPE2/MD
9 AUX
10 CD
11 TUNER

SECTION 2
ELECTRICAL ADJUSTMENT

Bias Adjustment

NOTE:

1. Perform the adjustment after the unit has warmed up sufficiently.
2. Perform the bias adjustment if the power transistor has been replaced.

Procedure:

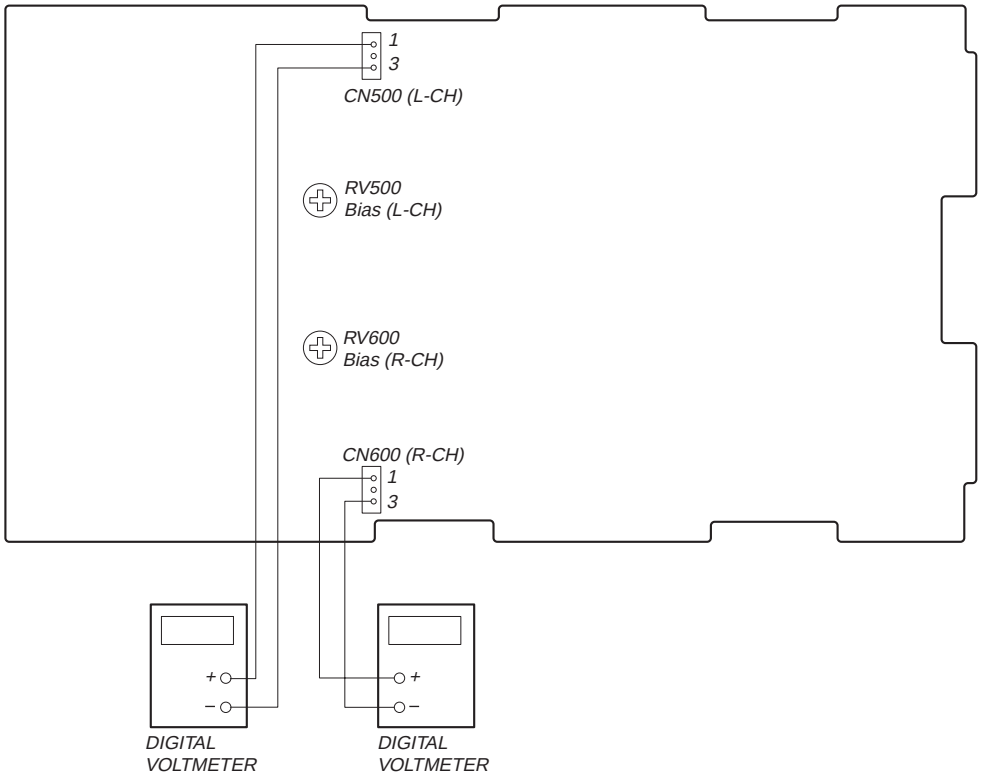
1. Rotate fully the bias adjusting semi-fixed resistors (RV500, RV600) to the MIN position (counterclockwise).
2. Connect a digital voltmeter to the CN500 and CN600.

	1 pin	3 pin
CN500 (L-CH)	+	–
CN600(R-CH)	+	–

3. Set the slide regulator to 0V, and press the ⏻ button (ON) on the set.
4. Raise gradually the slide regulator voltage up to the rated voltage.
5. At this time, confirm that the SP relay is turned on (it will click).
6. Adjust the RV500 and RV600 so that a reading of digital voltmeter is 10 ± 0.1 mV.
7. Return the slidack to 0 V, and press the ⏻ button (OFF) on the set.

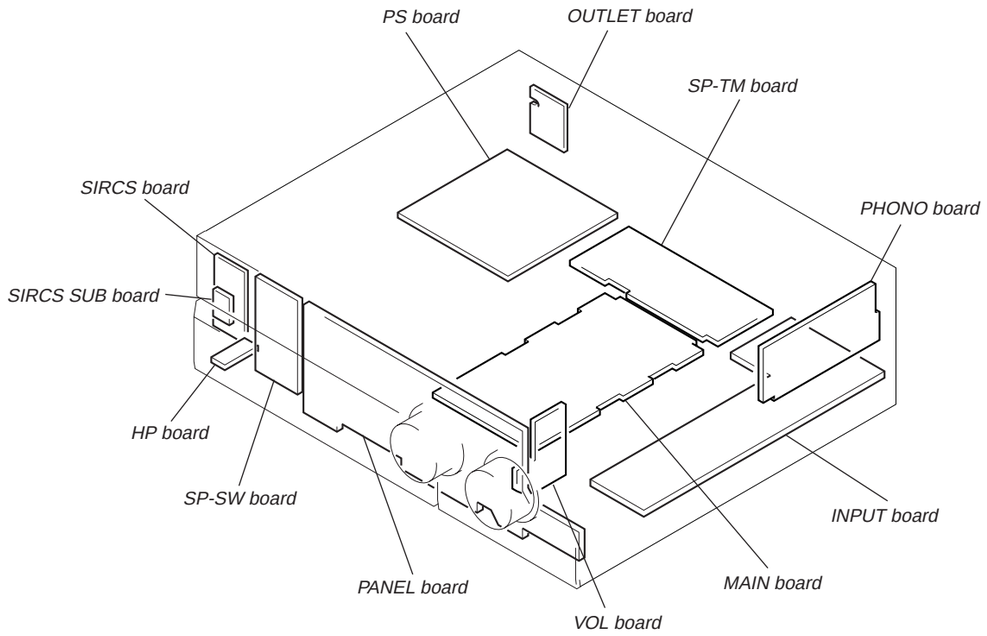
Adjustment Location :

[MAIN BOARD] – COMPONENT SIDE –



SECTION 3
DIAGRAMS

3-1. CIRCUIT BOARDS LOCATION



THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.
(In addition to this, the necessary note is printed in each block.)

For schematic diagrams.

Note:

- All capacitors are in µF unless otherwise noted. pF: µµF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- : nonflammable resistor.
- : fusible resistor.
- : panel designation.

Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

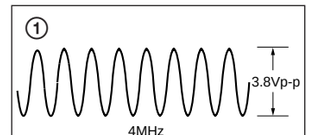
- B+ : B+ Line.
- B− : B– Line.
- : adjustment for repair.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : POWER ON
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope.
  Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : TUNER

For printed wiring boards.

Note:

- o—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.
- ▒▒ : Pattern from the side which enables seeing.
- **Indication of transistor**

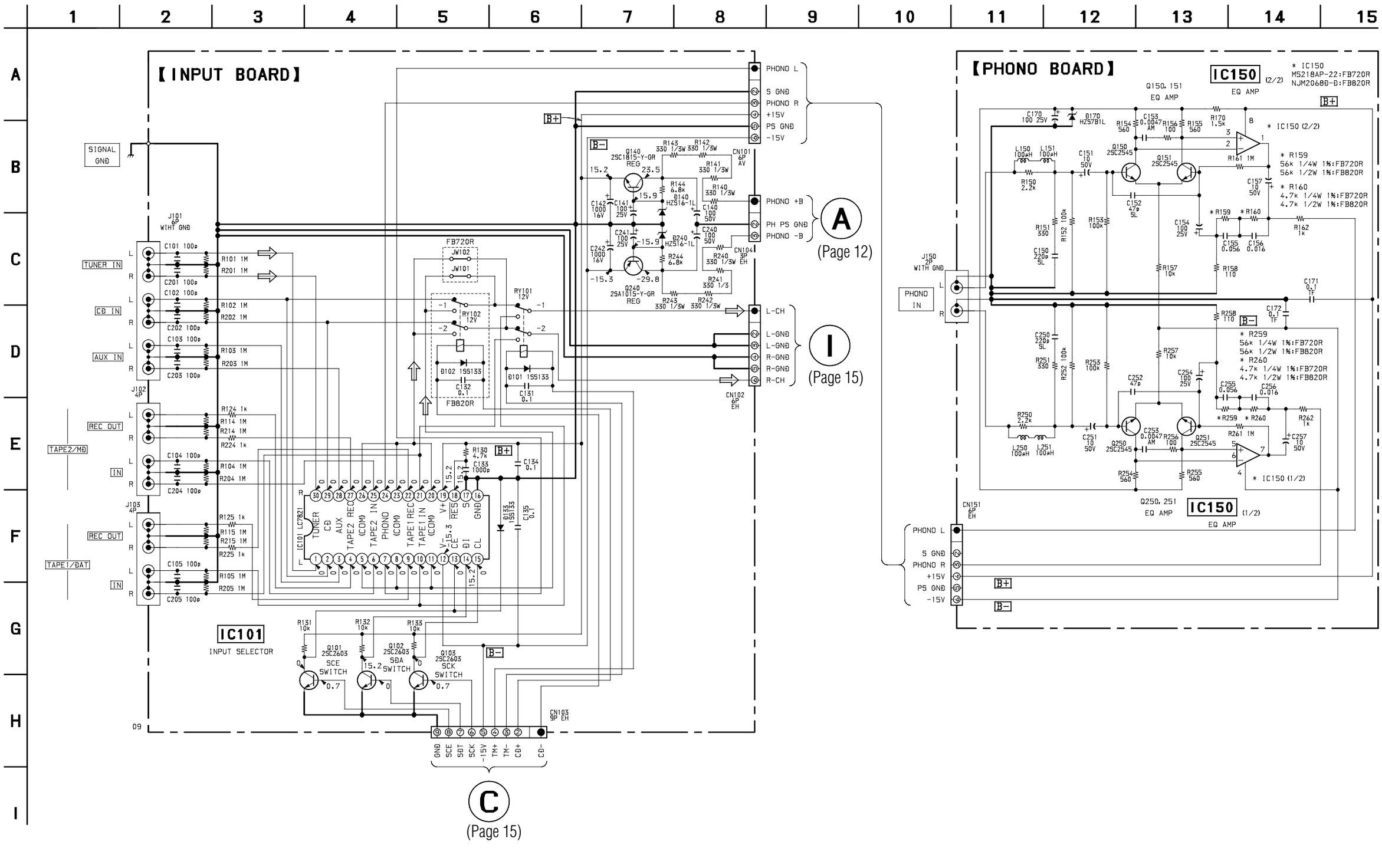
WAVEFORM



IC902 ① XOUT

3-2. SCHEMATIC DIAGRAM – INPUT SECTION –

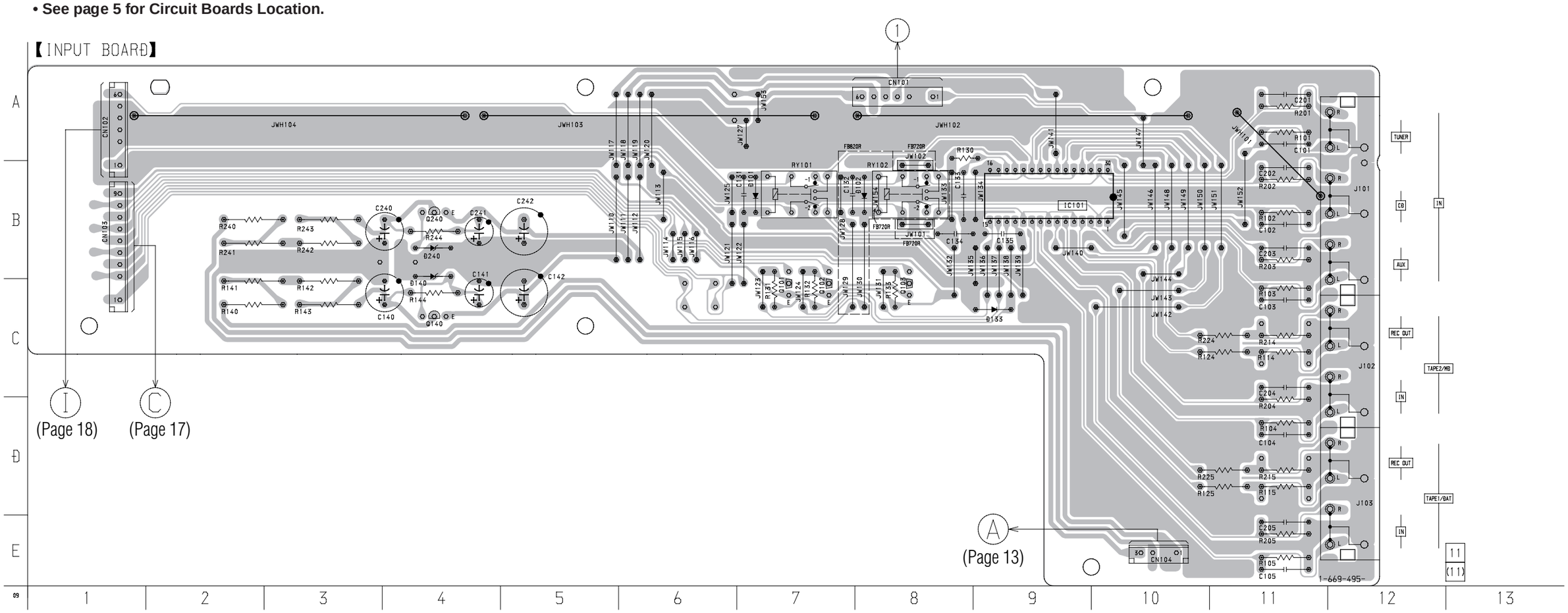
• See page 23 for IC Block Diagrams.



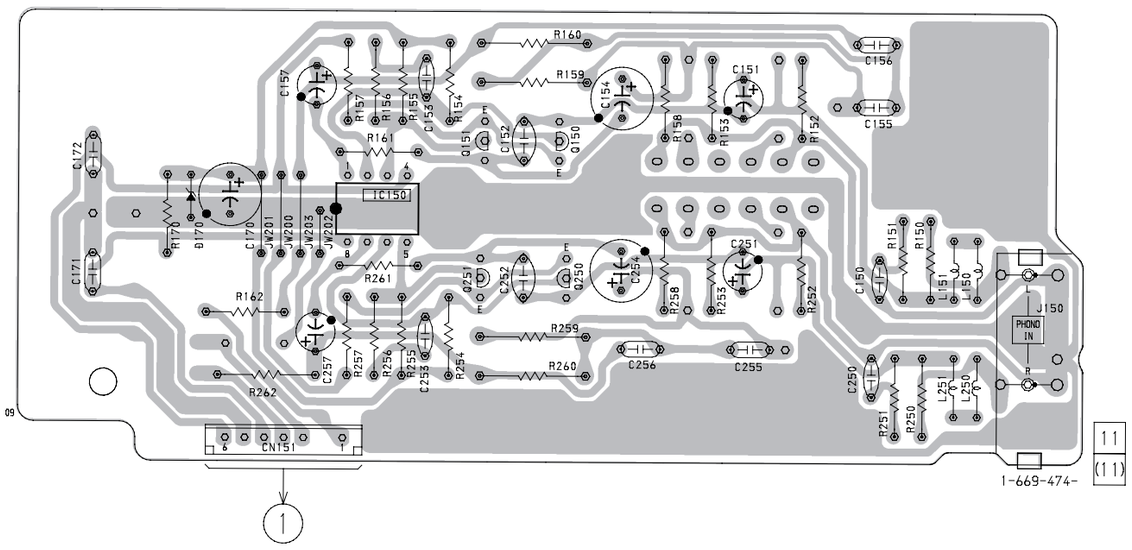
3-3. PRINTED WIRING BOARD – INPUT SECTION –

• See page 5 for Circuit Boards Location.

【INPUT BOARD】



【PHONO BOARD】

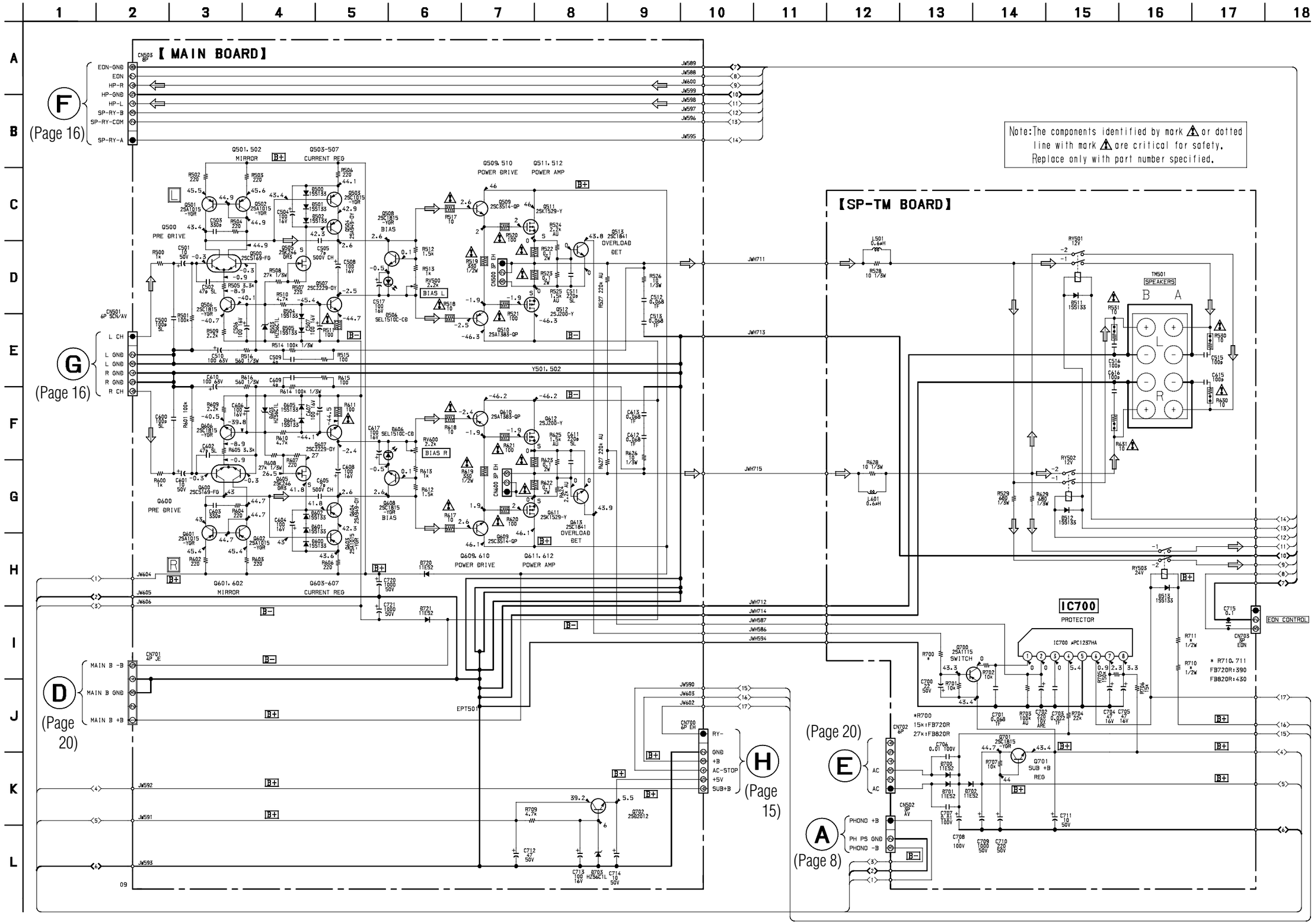


• **Semiconductor Location**

Ref. No.	Location
D101	B-7
D102	B-8
D133	C-9
D140	B-4
D240	B-4
IC101	B-9
Q101	C-7
Q102	C-7
Q103	C-8
Q140	C-4
Q240	B-4

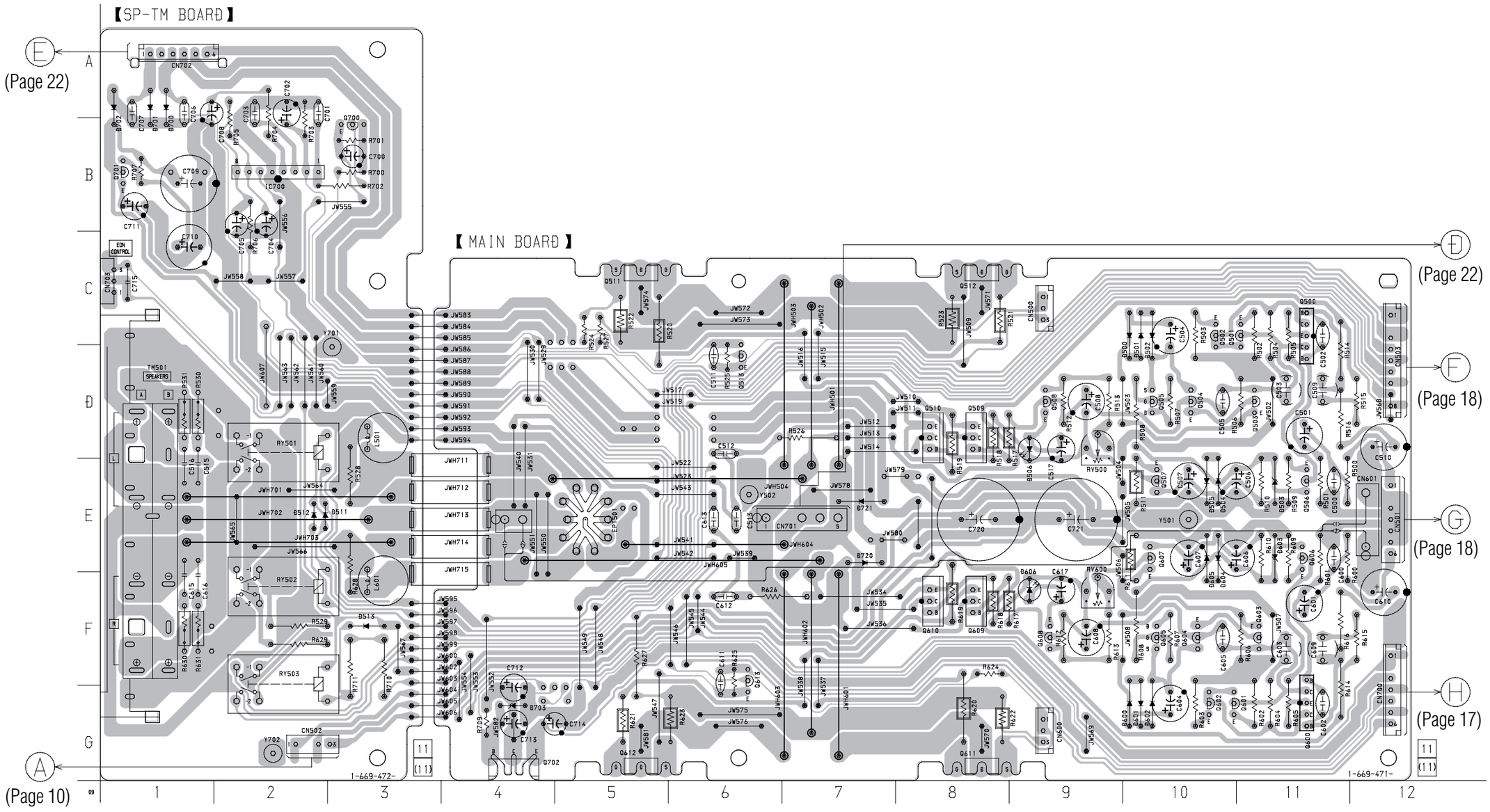
3-4. SCHEMATIC DIAGRAM – MAIN SECTION –

• See page 23 for IC Block Diagrams.



3-5. PRINTED WIRING BOARD – MAIN SECTION –

• See page 5 for Circuit Boards Location.

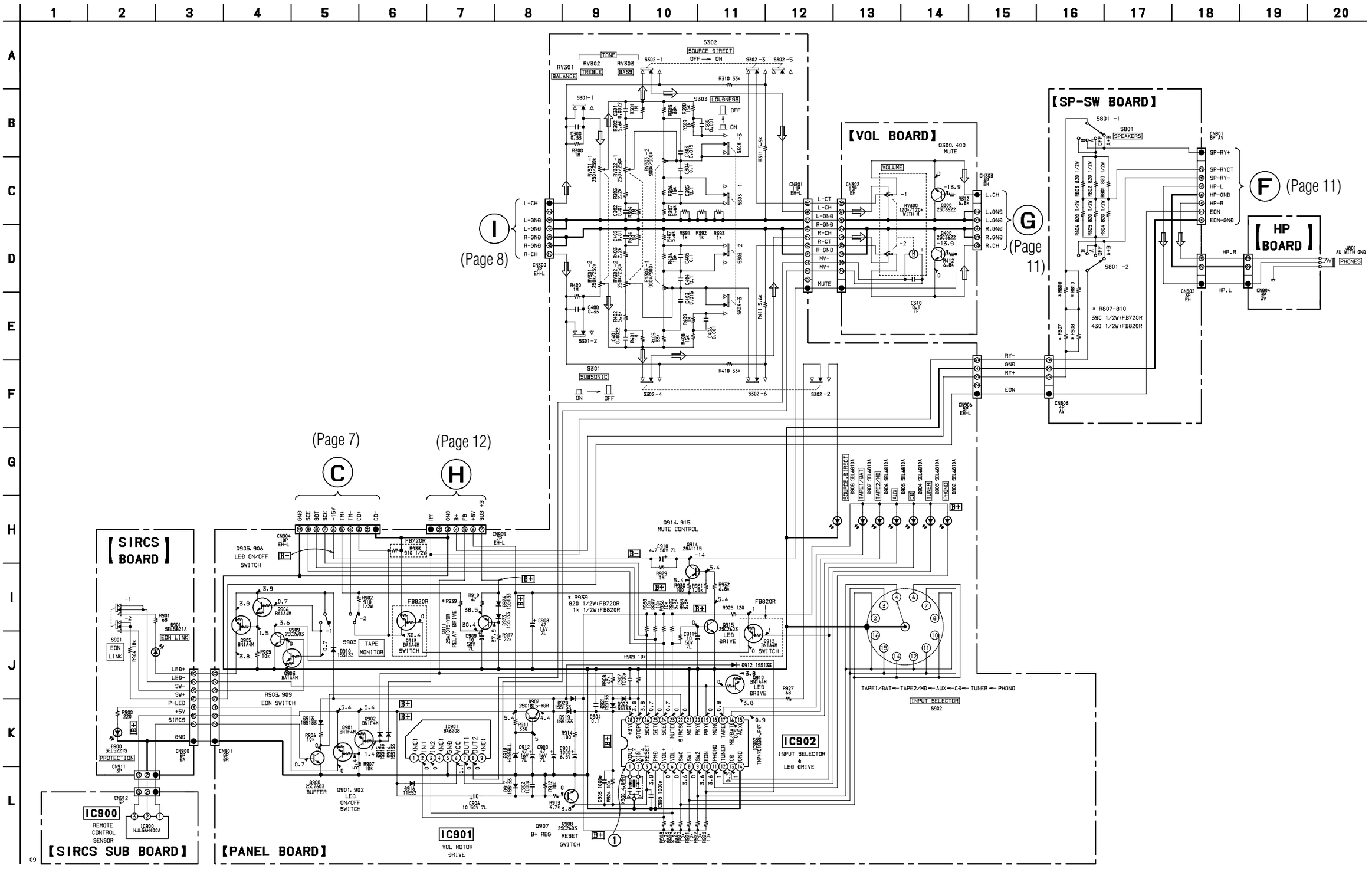


• Semiconductor Location

Ref. No.	Location
D500	C-10
D501	C-10
D502	C-10
D503	E-11
D504	E-10
D505	E-10
D506	D-9
D511	E-2
D512	E-2
D513	F-3
D600	G-10
D601	G-10
D602	G-10
D603	E-11
D604	E-10
D605	E-10
D606	F-9
D700	A-1
D701	A-1
D702	A-1
D703	G-4
D720	E-7
D721	E-7
IC700	B-2
Q500	C-11
Q501	C-11
Q502	C-10
Q503	D-11
Q504	D-10
Q505	D-10
Q506	E-11
Q507	E-10
Q508	D-9
Q509	D-8
Q510	D-8
Q511	C-5
Q512	C-8
Q513	D-6
Q600	G-11
Q601	G-11
Q602	G-10
Q603	F-11
Q604	F-10
Q605	F-10
Q606	E-11
Q607	E-10
Q608	F-9
Q609	F-8
Q610	F-10
Q611	G-8
Q612	G-5
Q613	F-6
Q700	B-3
Q701	B-1
Q702	G-4

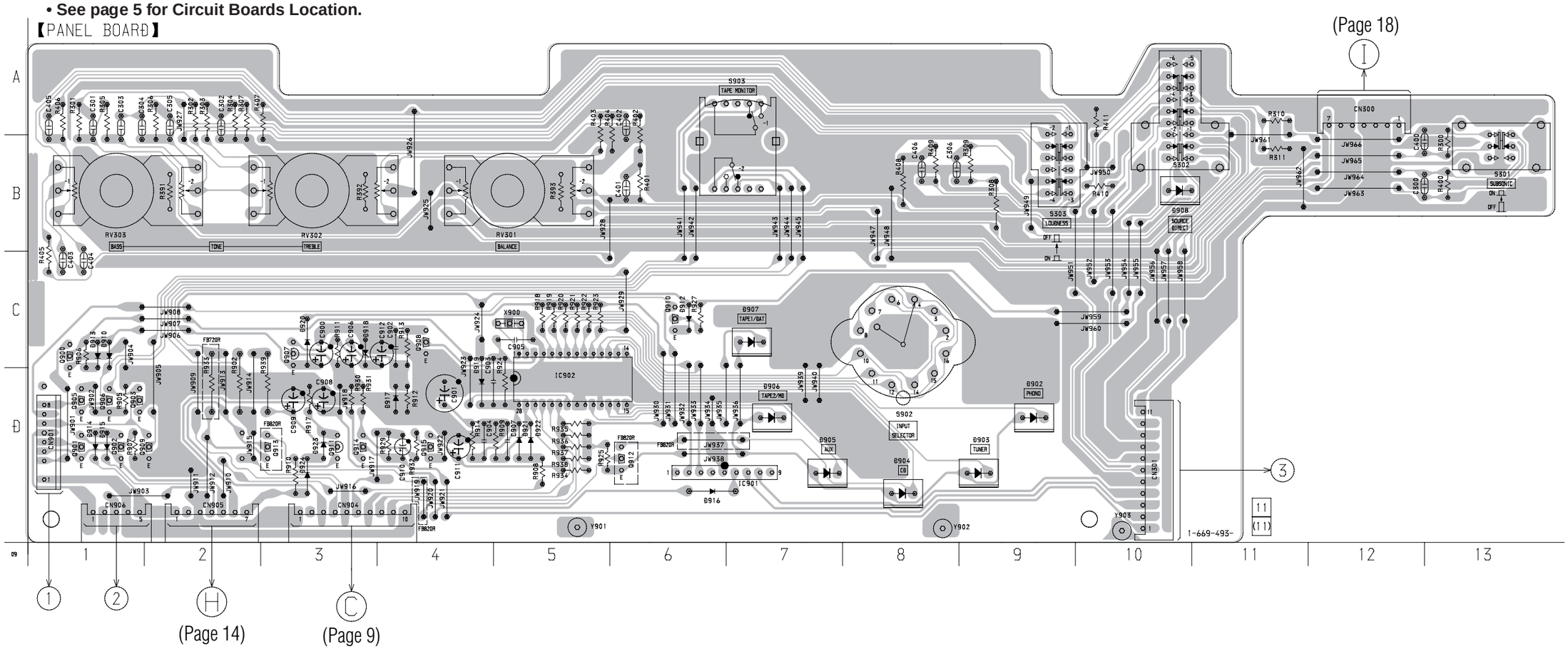
3-6. SCHEMATIC DIAGRAM – PANEL SECTION –

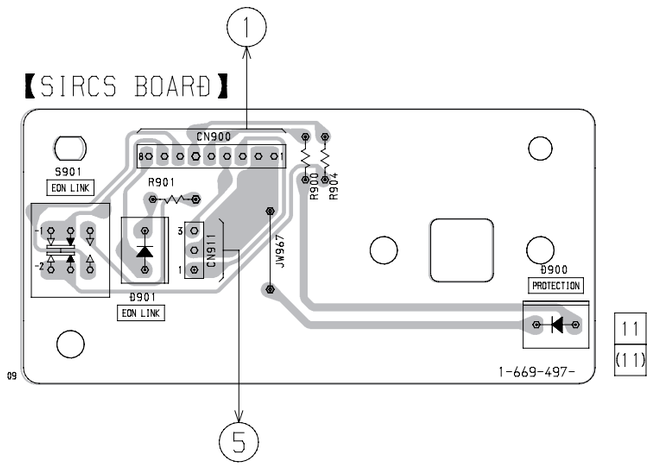
- See page 5 for Waveforms.
- See page 23 for IC Block Diagram.
- See page 24 for IC Pin Function.

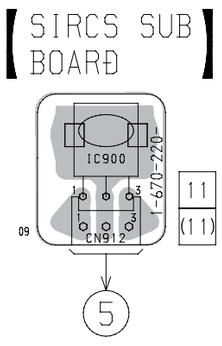


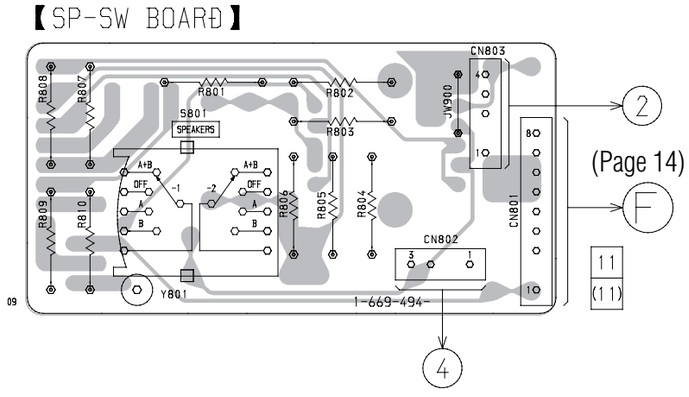
3-7. PRINTED WIRING BOARD – PANEL SECTION –

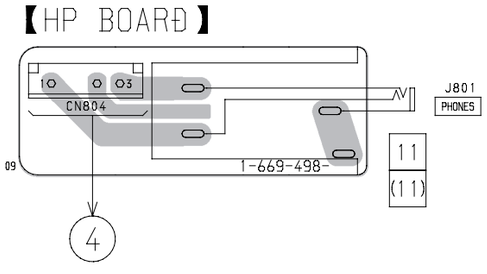
• See page 5 for Circuit Boards Location.

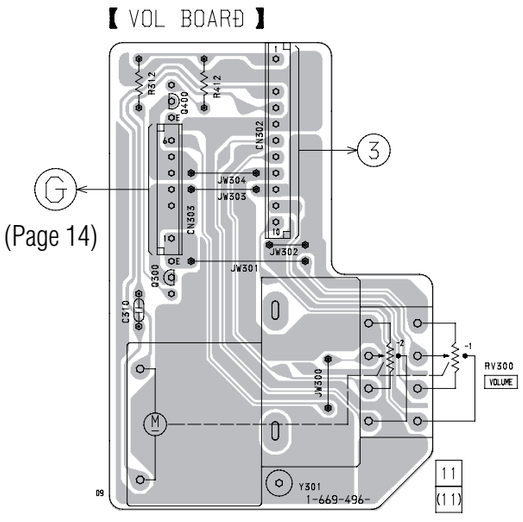








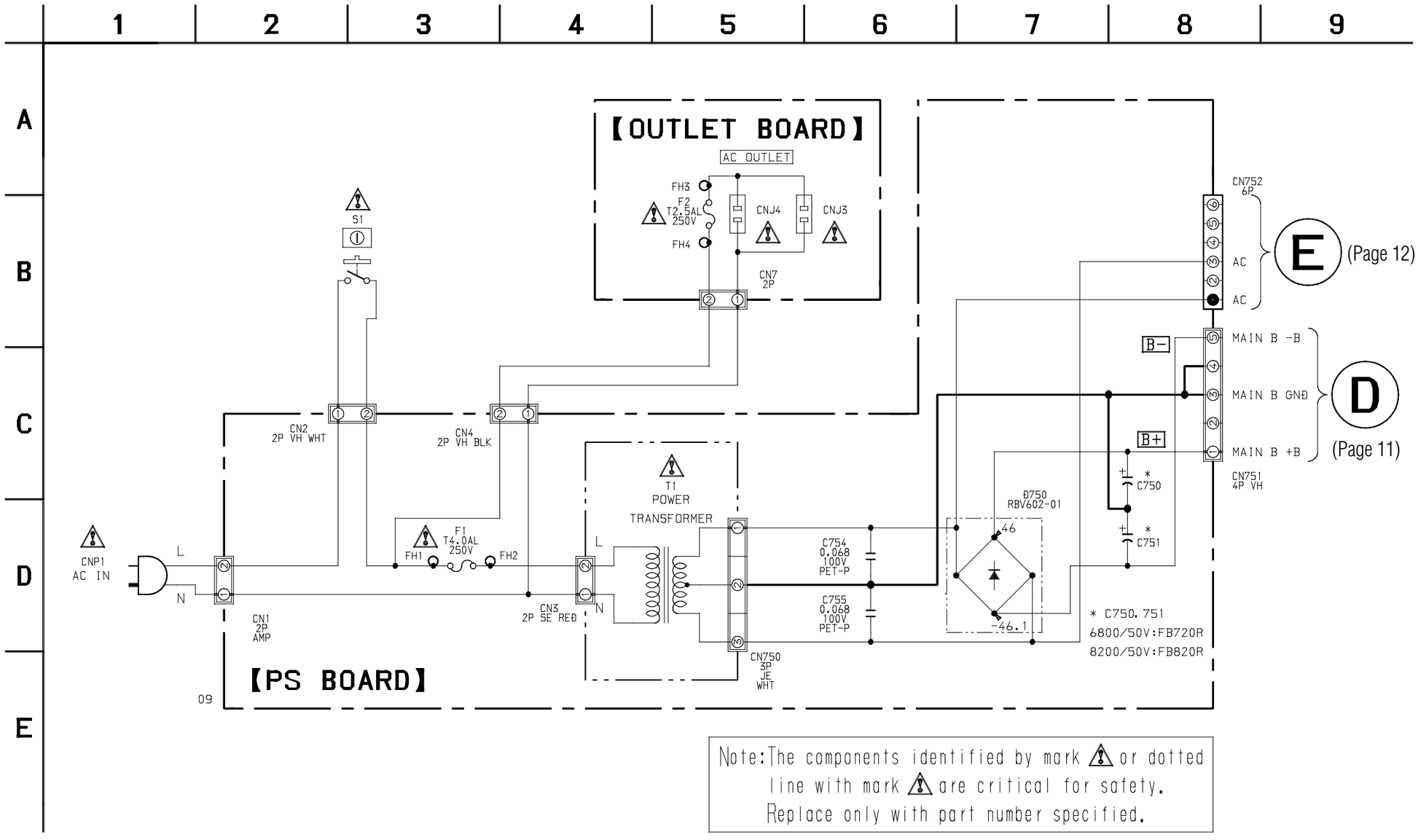




• **Semiconductor Location**

Ref. No.	Location
D902	D-9
D903	D-9
D904	E-8
D905	D-7
D906	D-7
D907	C-7
D908	B-10
D910	C-1
D912	C-6
D913	C-1
D914	D-1
D915	D-1
D916	E-6
D917	D-4
D918	C-3
D919	D-4
D920	C-3
D921	D-5
D922	D-5
D923	D-3
D924	D-3
IC901	D-7
IC902	D-5
Q900	C-1
Q901	D-1
Q902	D-1
Q903	D-1
Q905	D-1
Q906	D-1
Q907	C-3
Q908	C-4
Q909	D-2
Q910	C-6
Q911	D-3
Q912	D-6
Q913	D-3
Q914	D-3
Q915	D-4

3-8. SCHEMATIC DIAGRAM – POWER SECTION –

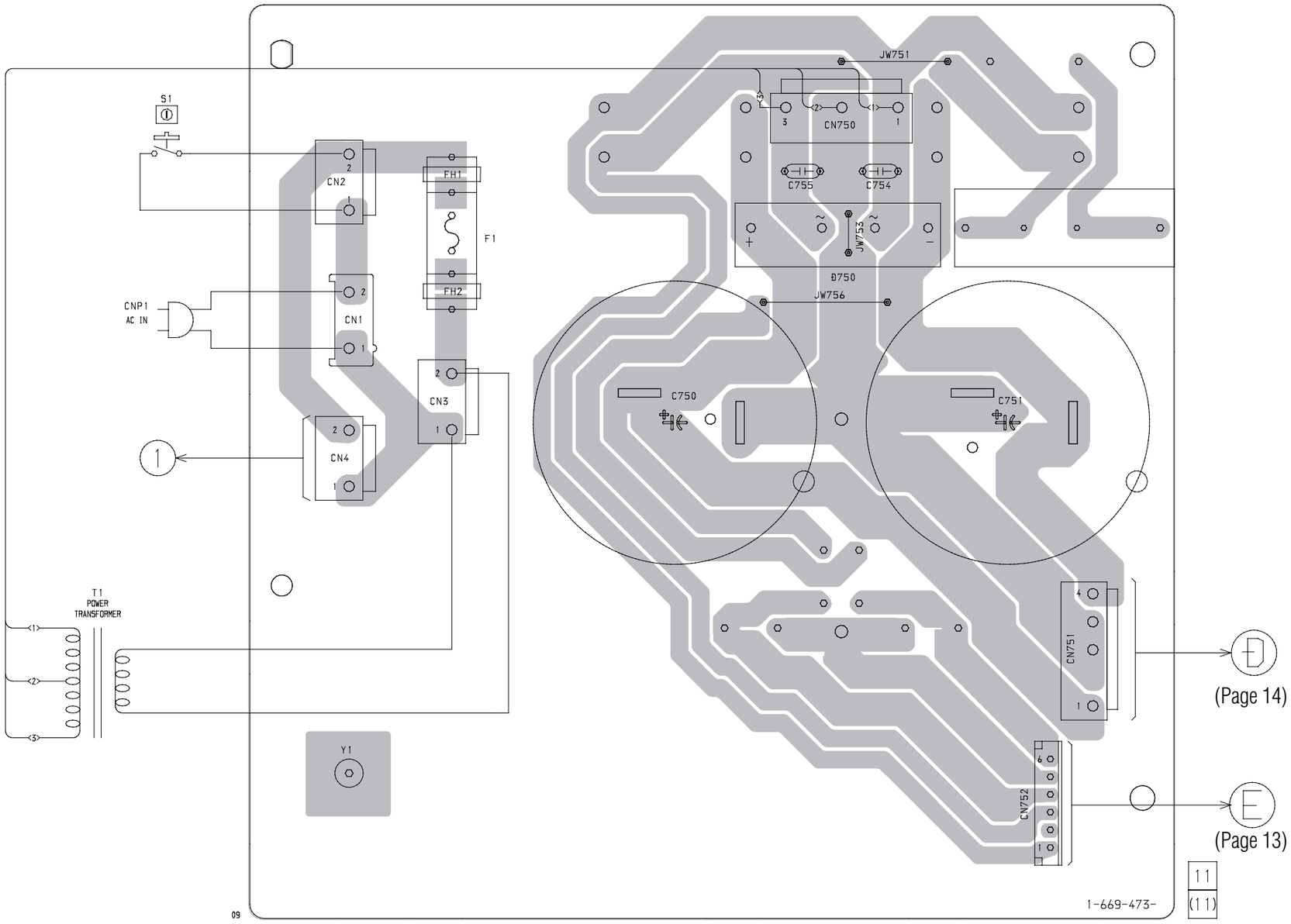


Note: The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

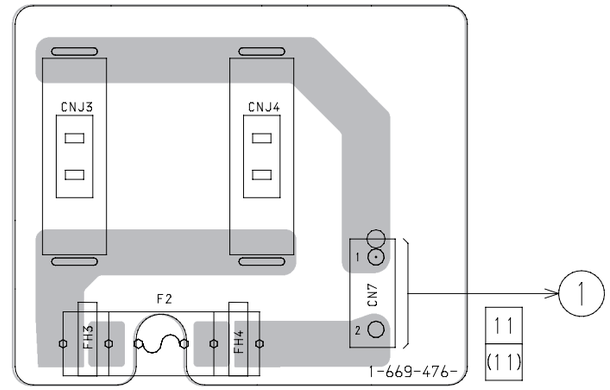
3-9. PRINTED WIRING BOARD – POWER SECTION –

• See page 5 for Circuit Boards Location.

【PS BOARD】



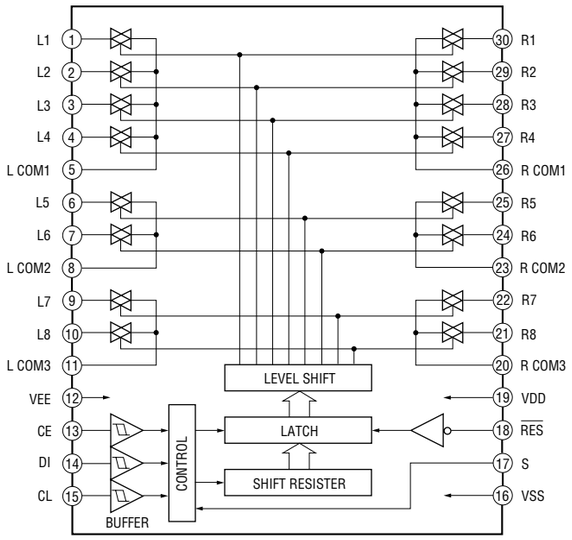
【OUTLET BOARD】



3-10. IC BLOCK DIAGRAMS

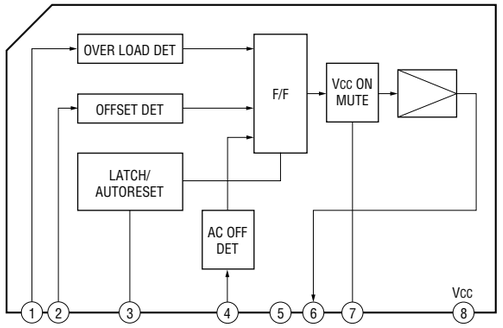
• Input section

IC101 LC7821



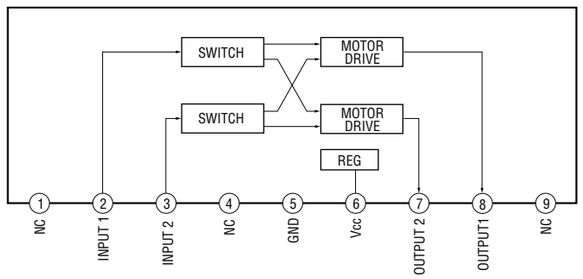
• Main section

IC700 uPC1237HA



• Panel section

IC901 BA6208



3-11. IC PIN FUNCTION

• IC902 Input Control & LED Drive (TMP47C103N-JP47)

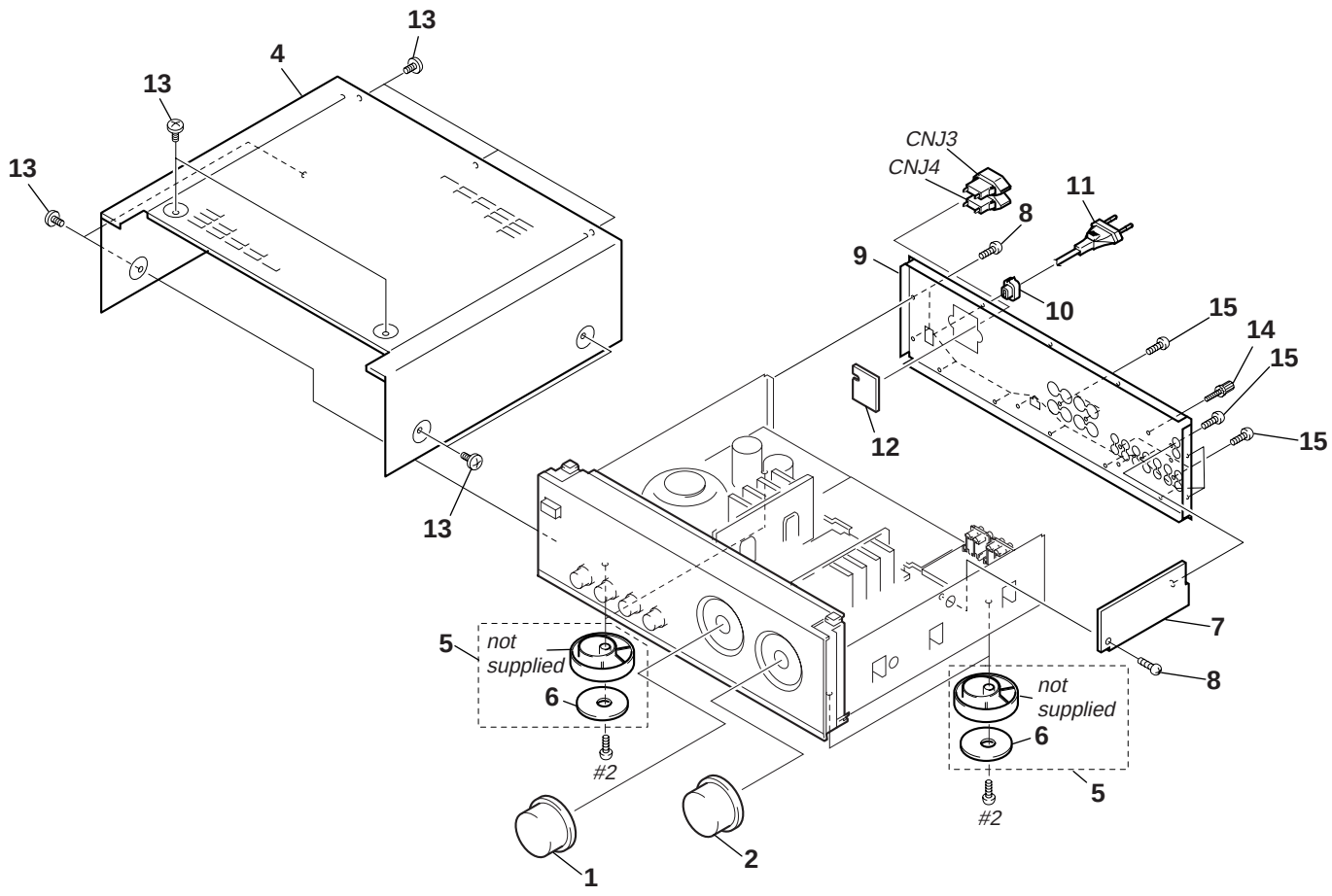
Pin No.	Pin Name	I/O	Function
1	X OUT	O	System clock (4MHz)
2	X IN	I	
3	RESET	I	Reset input
4	PMD	I	Mode select input
5	VOL +	O	Motor drive output (+)
6	VOL –	O	Motor drive output (–)
7	SW 0	I	Rotary switch input (CD)
8	SW 1	I	Rotary switch input (TUNER)
9	SW 2	I	Rotary switch input (PHONO)
10	EON	I	EON signal input
11	PHONO	O	PHONO LED drive output
12	TUNER	O	TUNER LED drive output
13	CD	O	CD LED drive output
14	GND	—	Ground
15	AUX	O	AUX LED drive output
16	MD/DAT	O	TAPE “2” LED drive output
17	TAPE	O	TAPE “1” LED drive output
18	MON	O	MONITOR output
19	PRY	O	Power relay output
20	PKY	I	Power key input
21	MOI	I	MONITOR input
22	SIRCS	I	SIRCS input
23	MUTE	O	Muting output
24	SCE	O	Chip enble output
25	SDT	O	Serial data output
26	SCK	O	Serial clock output
27	STOP	I	STOP input
28	+3V	—	+3V Power supply

SECTION 4
EXPLODED VIEW

NOTE:
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Hardware (# mark) list and accessories and packing materials are given in the last of this parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

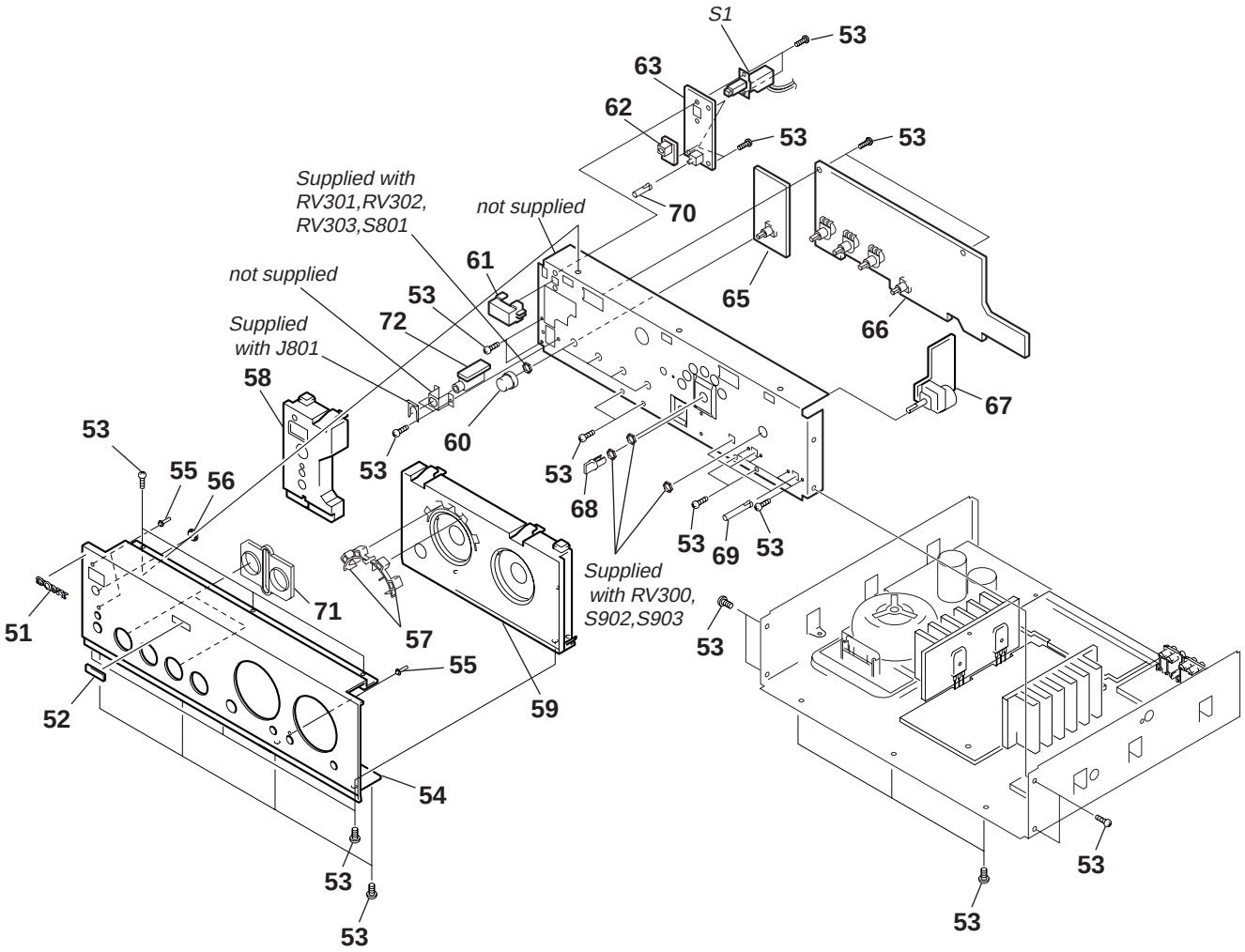
4-1. CASE AND BACK PANEL SECTION



Ref. No.	Part No.	Description	Remark
1	X-4949-780-1	KNOB (SELECTOR) ASSY	
2	X-4949-781-1	KNOB (VOLUME) ASSY	
* 4	4-999-439-01	CASE (413235)	
5	X-4949-760-1	FOOT ASSY	
6	4-970-124-01	CUSHION (F50180S)	
* 7	A-4407-621-A	PHONO BOARD, COMPLETE (FB720R)	
* 7	A-4407-640-A	PHONO BOARD, COMPLETE (FB820R)	
8	4-967-961-01	SCREW (3X8)	
* 9	4-999-451-11	PANEL, BACK (FB820R)	
* 9	4-999-451-21	PANEL, BACK (FB720R)	

Ref. No.	Part No.	Description	Remark
* 10	3-703-244-00	BUSHING (2104), CORD	
⚠11	1-777-185-11	CORD, POWER	
* 12	1-669-476-11	OUTLET BOARD	
13	3-710-901-11	SCREW, TAPPING	
14	4-947-010-01	SCREW, FEEDER FIXED	
15	3-704-515-41	SCREW (BV/RING)	
⚠CNJ3	1-526-794-11	OUTLET, AC	
⚠CNJ4	1-526-794-11	OUTLET, AC	

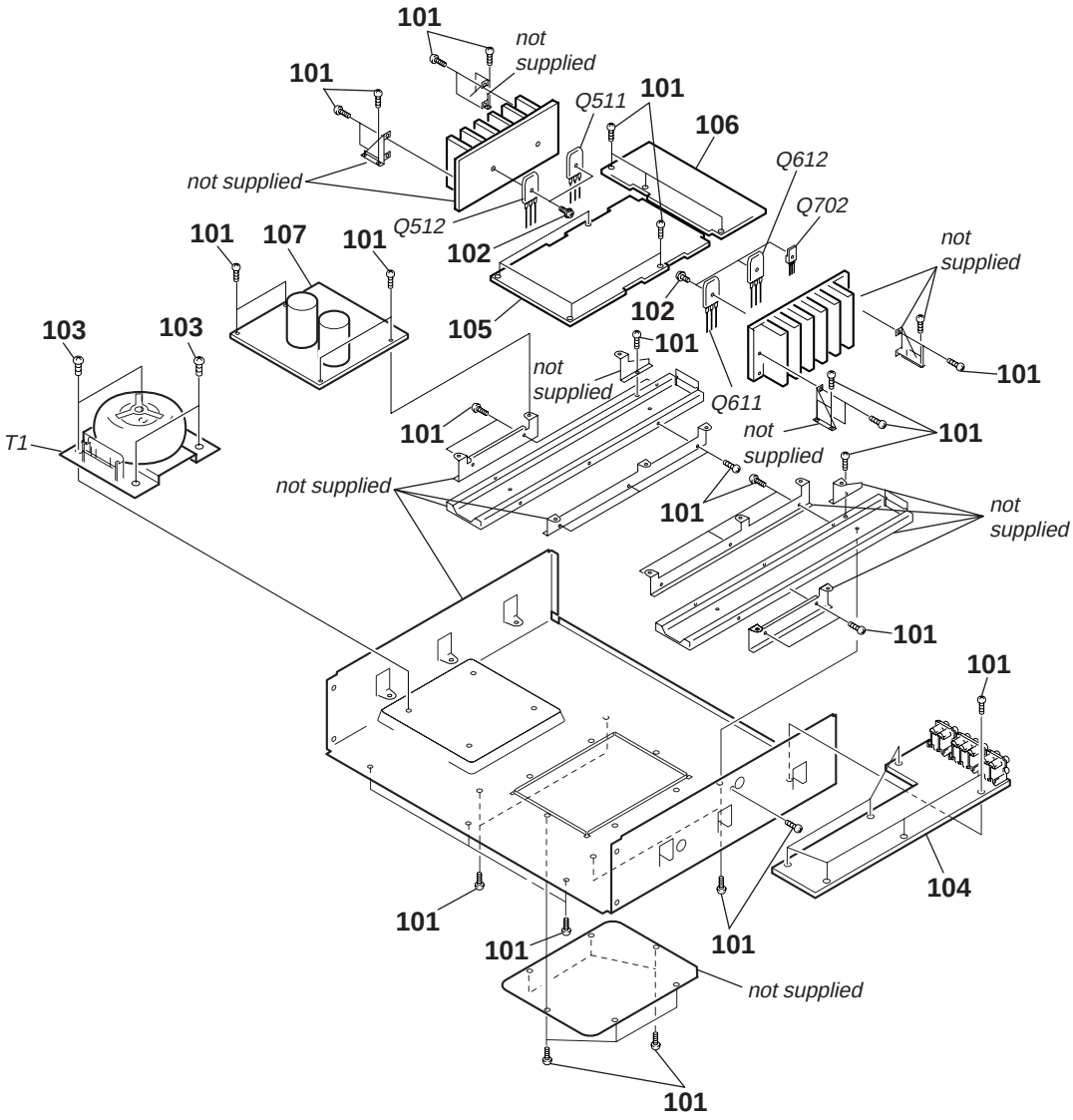
4-2. FRONT PANEL SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
51	4-942-568-41	EMBLEM (NO.5), SONY	
52	4-965-651-01	EMBLEM (MOS)	
53	4-967-961-01	SCREW (3X8)	
54	4-999-415-01	PANEL, FRONT (FB820R)	
54	4-999-415-11	PANEL, FRONT (FB720R)	
55	4-999-413-01	INDICATOR (PROTECTION)	
56	4-980-776-01	WINDOW, REMOTE CONTROL	
* 57	4-999-418-01	INDICATOR (SELECTOR)	
58	4-999-416-01	BASE (L), PANEL	
59	4-999-417-01	BASE (R), PANEL	
60	4-999-419-01	KNOB (D23)	
61	3-024-055-01	BUTTON (POWER)	
* 62	1-670-220-11	SIRCS SUB BOARD	
* 63	1-669-497-11	SIRCS BOARD	
* 65	1-669-494-11	SP-SW BOARD	
* 66	A-4407-623-A	PANEL BOARD, COMPLETE (FB720R)	
* 66	A-4407-632-A	PANEL BOARD, COMPLETE (FB820R)	
* 67	1-669-496-11	VOL BOARD	
68	4-950-189-01	KNOB (A) (VOL)	
69	4-970-146-01	BUTTON	
70	4-980-189-01	KNOB (DIA. 6)	
71	4-999-420-01	ESCUTCHEON (TONE)	
* 72	1-669-498-11	HP BOARD	
⚠S1	1-554-920-61	SWITCH, PUSH (AC POWER)(1 KEY)(①)	

4-3. CHASSIS SECTION



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description	Remark
101	4-967-961-01	SCREW (3X8)	
102	3-905-609-11	SCREW (TRANSISTOR)	
103	4-967-960-01	SCREW (4X8)	
* 104	A-4407-624-A	INPUT BOARD, COMPLETE (FB720R)	
* 104	A-4407-636-A	INPUT BOARD, COMPLETE (FB820R)	
* 105	A-4407-618-A	MAIN BOARD, COMPLETE (FB720R)	
* 105	A-4407-637-A	MAIN BOARD, COMPLETE (FB820R)	
* 106	A-4407-619-A	SP-TM BOARD, COMPLETE (FB720R)	
* 106	A-4407-638-A	SP-TM BOARD, COMPLETE (FB820R)	

Ref. No.	Part No.	Description	Remark
* 107	1-669-473-11	PS BOARD	
Q511	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q512	8-729-232-46	TRANSISTOR 2SJ200-Y	
Q611	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q612	8-729-232-46	TRANSISTOR 2SJ200-Y	
Q702	8-729-209-15	TRANSISTOR 2SD2012	
⚠T1	1-431-870-11	TRANSFORMER, POWER (FB720R)	
⚠T1	1-431-872-11	TRANSFORMER, POWER (FB820R)	

HP INPUT

SECTION 5
ELECTRICAL PARTS LIST

Note:

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX, -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- RESISTORS
  All resistors are in ohms
  METAL: Metal-film resistor
  METAL OXIDE: Metal Oxide-film resistor
  F : nonflammable
- SEMICONDUCTORS
  In each case, u: µ , for example:
  uA...: µ A..., uPA...: µ PA..., uPB...: µ PB..., uPC...: µ PC..., uPD...: µ PD...
- CAPACITORS
  uF : µ F
- COILS
  uH : µ H

Ref. No.	Part No.	Description			Remark
*	1-669-498-11	HP BOARD			
		********			
		< CONNECTOR >			
CN804	1-691-765-11	PLUG (MICRO CONNECTOR) 3P			
		< JACK >			
J801	1-770-307-11	JACK (LARGE TYPE)(PHONES)			
**********					
*	A-4407-624-A	INPUT BOARD, COMPLETE (FB720R)			
		**********			
*	A-4407-636-A	INPUT BOARD, COMPLETE (FB820R)			
		**********			
		< CAPACITOR >			
C101	1-162-282-31	CERAMIC	100PF	10%	50V
C102	1-162-282-31	CERAMIC	100PF	10%	50V
C103	1-162-282-31	CERAMIC	100PF	10%	50V
C104	1-162-282-31	CERAMIC	100PF	10%	50V
C105	1-162-282-31	CERAMIC	100PF	10%	50V
C131	1-164-159-11	CERAMIC	0.1uF		50V
C132	1-164-159-11	CERAMIC	0.1uF		50V (FB820R)
C133	1-162-294-31	CERAMIC	0.001uF	10%	50V
C134	1-164-159-11	CERAMIC	0.1uF		50V
C135	1-164-159-11	CERAMIC	0.1uF		50V
C140	1-126-052-11	ELECT	100uF	20%	50V
C141	1-126-023-11	ELECT	100uF	20%	25V
C142	1-126-013-11	ELECT	1000uF	20%	16V
C201	1-162-282-31	CERAMIC	100PF	10%	50V
C202	1-162-282-31	CERAMIC	100PF	10%	50V
C203	1-162-282-31	CERAMIC	100PF	10%	50V
C204	1-162-282-31	CERAMIC	100PF	10%	50V
C205	1-162-282-31	CERAMIC	100PF	10%	50V
C240	1-126-052-11	ELECT	100uF	20%	50V
C241	1-126-023-11	ELECT	100uF	20%	25V
C242	1-126-013-11	ELECT	1000uF	20%	16V
		< CONNECTOR >			
CN102	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
CN103	1-691-771-11	PLUG (MICRO CONNECTOR) 9P			
CN104	1-691-765-11	PLUG (MICRO CONNECTOR) 3P			
		< DIODE >			
D101	8-719-911-19	DIODE 1SS119-25			
D102	8-719-911-19	DIODE 1SS119-25 (FB820R)			
D133	8-719-911-19	DIODE 1SS119-25			
D140	8-719-986-38	DIODE HZS16-1LTA			
D240	8-719-986-38	DIODE HZS16-1LTA			
		< IC >			
IC101	8-759-805-13	IC LC7821			
		< JACK >			
J101	1-774-411-11	JACK, PIN 6P (TUNER, CD, AUX IN)			
J102	1-573-028-31	JACK, PIN 4P (TAPE2/MD)			
J103	1-573-028-31	JACK, PIN 4P (TAPE1/DAT)			
		< TRANSISTOR >			
Q101	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q102	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q103	8-729-620-05	TRANSISTOR 2SC2603-EF			
Q140	8-729-119-78	TRANSISTOR 2SC2785-HFE			
Q240	8-729-201-53	TRANSISTOR 2SA1015-GR			
		< RESISTOR >			
R101	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R101	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R102	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R102	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R103	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R103	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R104	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R104	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R105	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R105	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R114	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R114	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R115	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R115	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R124	1-259-167-21	CARBON	1K	5%	1/4W (FB820R)

Ref. No.	Part No.	Description			Remark
R124	1-259-428-11	CARBON	1K	5%	1/6W (FB720R)
R125	1-259-167-21	CARBON	1K	5%	1/4W (FB820R)
R125	1-259-428-11	CARBON	1K	5%	1/6W (FB720R)
R130	1-249-425-11	CARBON	4.7K	5%	1/4W F
R131	1-249-429-11	CARBON	10K	5%	1/4W
R132	1-249-429-11	CARBON	10K	5%	1/4W
R133	1-249-429-11	CARBON	10K	5%	1/4W
R140	1-249-198-11	CARBON	330	5%	1/3W
R141	1-249-198-11	CARBON	330	5%	1/3W
R142	1-249-198-11	CARBON	330	5%	1/3W
R143	1-249-198-11	CARBON	330	5%	1/3W
R144	1-259-187-11	CARBON	6.8K	5%	1/4W
R201	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R201	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R202	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R202	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R203	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R203	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R204	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R204	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R205	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R205	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R214	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R214	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R215	1-259-500-91	CARBON	1M	5%	1/6W (FB720R)
R215	1-259-239-11	CARBON	1M	5%	1/4W (FB820R)
R224	1-259-428-11	CARBON	1K	5%	1/6W (FB720R)
R224	1-259-167-21	CARBON	1K	5%	1/4W (FB820R)
R225	1-259-428-11	CARBON	1K	5%	1/6W (FB720R)
R225	1-259-167-21	CARBON	1K	5%	1/4W (FB820R)
R240	1-249-198-11	CARBON	330	5%	1/3W
R241	1-249-198-11	CARBON	330	5%	1/3W
R242	1-249-198-11	CARBON	330	5%	1/3W
R243	1-249-198-11	CARBON	330	5%	1/3W
R244	1-259-187-11	CARBON	6.8K	5%	1/4W
		< RELAY >			
RY101	1-515-614-11	RELAY			
RY102	1-515-614-11	RELAY (FB820R)			

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Ref. No.	Part No.	Description			Remark
*	A-4407-618-A	MAIN BOARD, COMPLETE (FB720R)			
		**********			
*	A-4407-637-A	MAIN BOARD, COMPLETE (FB820R)			
		**********			
		< CAPACITOR >			
C500	1-102-973-00	CERAMIC	100PF	5%	50V
C501	1-124-721-11	ELECT	10uF	20%	50V
C502	1-101-880-00	CERAMIC	47PF	5%	50V
C503	1-102-820-00	CERAMIC	330PF	5%	50V
C504	1-126-023-11	ELECT	100uF	20%	16V
C505	1-107-587-11	CERAMIC	7PF	0.5PF	500V
C506	1-126-023-11	ELECT	100uF	20%	16V
C507	1-126-023-11	ELECT	100uF	20%	16V
C508	1-126-023-11	ELECT	100uF	20%	16V
C509	1-102-937-00	CERAMIC	4.0PF	±0.25PF	50V
C510	1-126-365-51	ELECT	100uF	20%	63V
C511	1-102-978-00	CERAMIC	220PF	5%	50V
C512	1-136-163-00	FILM	0.068uF	5%	50V
C513	1-136-163-00	FILM	0.068uF	5%	50V
C517	1-126-023-11	ELECT	100uF	20%	16V
C600	1-102-973-00	CERAMIC	100PF	5%	50V
C601	1-124-721-11	ELECT	10uF	20%	50V
C602	1-101-880-00	CERAMIC	47PF	5%	50V
C603	1-102-820-00	CERAMIC	330PF	5%	50V
C604	1-126-023-11	ELECT	100uF	20%	16V
C605	1-107-587-11	CERAMIC	7PF	0.5PF	500V
C606	1-126-023-11	ELECT	100uF	20%	16V
C607	1-126-023-11	ELECT	100uF	20%	16V
C608	1-126-023-11	ELECT	100uF	20%	16V
C609	1-102-937-00	CERAMIC	4.0PF	±0.25PF	50V
C610	1-126-365-51	ELECT	100uF	20%	63V
C611	1-102-978-00	CERAMIC	220PF	5%	50V
C612	1-136-163-00	FILM	0.068uF	5%	50V
C613	1-136-163-00	FILM	0.068uF	5%	50V
C617	1-126-023-11	ELECT	100uF	20%	16V
C712	1-126-967-11	ELECT	47uF	20%	50V
C713	1-126-933-11	ELECT	100uF	20%	16V
C714	1-126-964-11	ELECT	10uF	20%	50V
C720	1-126-056-11	ELECT	1000uF	20%	50V (FB720R)
C720	1-126-170-11	ELECT	1000uF	20%	50V (FB820R)
C721	1-126-056-11	ELECT	1000uF	20%	50V (FB720R)
C721	1-126-170-11	ELECT	1000uF	20%	50V (FB820R)
		< CONNECTOR >			
CN500	1-564-506-11	PLUG, CONNECTOR 3P			
CN503	1-691-770-11	PLUG (MICRO CONNECTOR) 8P			
CN600	1-564-506-11	PLUG, CONNECTOR 3P			
CN700	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
		< DIODE >			
D500	8-719-911-19	DIODE 1SS119-25			
D501	8-719-911-19	DIODE 1SS119-25			

MAIN

Ref. No.	Part No.	Description	Remark
D502	8-719-911-19	DIODE 1SS119-25	
D503	8-719-933-39	DIODE HZS6C1L	
D504	8-719-911-19	DIODE 1SS119-25	
D505	8-719-911-19	DIODE 1SS119-25	
D506	8-719-310-61	DIODE SEL1510C-D	
D600	8-719-911-19	DIODE 1SS119-25	
D601	8-719-911-19	DIODE 1SS119-25	
D602	8-719-911-19	DIODE 1SS119-25	
D603	8-719-933-39	DIODE HZS6C1L	
D604	8-719-911-19	DIODE 1SS119-25	
D605	8-719-911-19	DIODE 1SS119-25	
D606	8-719-310-61	DIODE SEL1510C-D	
D703	8-719-933-39	DIODE HZS6C1L	
D720	8-719-024-99	DIODE 11ES2-NTA2B	
D721	8-719-024-99	DIODE 11ES2-NTA2B	
		< BRIDGE >	
JWH711	4-999-918-01	BRIDGE (PC-BOARD)	
JWH712	4-999-918-01	BRIDGE (PC-BOARD)	
JWH713	4-999-918-01	BRIDGE (PC-BOARD)	
JWH714	4-999-918-01	BRIDGE (PC-BOARD)	
JWH715	4-999-918-01	BRIDGE (PC-BOARD)	
		< TRANSISTOR >	
Q500	8-729-045-15	TRANSISTOR 2SC5169-FG	
Q501	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q502	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q503	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q504	8-729-021-74	TRANSISTOR 2SA949-OY-TPE6	
Q505	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q506	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q507	8-729-021-73	TRANSISTOR 2SC2229-OY-TPE6	
Q508	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q509	8-729-104-18	TRANSISTOR 2SC3514	
Q510	8-729-104-91	TRANSISTOR 2SA1383	
Q511	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q512	8-729-232-46	TRANSISTOR 2SJ200-Y	
Q513	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q600	8-729-045-15	TRANSISTOR 2SC5169-FG	
Q601	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q602	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q603	8-729-201-53	TRANSISTOR 2SA1015-GR	
Q604	8-729-021-74	TRANSISTOR 2SA949-OY-TPE6	
Q605	8-729-202-67	TRANSISTOR 2SK246-GR3	
Q606	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q607	8-729-021-73	TRANSISTOR 2SC2229-OY-TPE6	
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q609	8-729-104-18	TRANSISTOR 2SC3514	
Q610	8-729-104-91	TRANSISTOR 2SA1383	
Q611	8-729-232-45	TRANSISTOR 2SK1529-Y	
Q612	8-729-232-46	TRANSISTOR 2SJ200-Y	
Q613	8-729-140-84	TRANSISTOR 2SC1841-PAFAEA	
Q702	8-729-209-15	TRANSISTOR 2SD2012	
		< RESISTOR >	
R500	1-259-167-21	CARBON 1K 5% 1/4W	
R501	1-259-215-21	CARBON 100K 5% 1/4W	
R502	1-259-151-21	CARBON 220 5% 1/4W	
R503	1-259-151-21	CARBON 220 5% 1/4W	
R504	1-259-151-21	CARBON 220 5% 1/4W	
R505	1-259-179-21	CARBON 3.3K 5% 1/4W	
R506	1-259-151-21	CARBON 220 5% 1/4W	
R507	1-259-151-21	CARBON 220 5% 1/4W	
R508	1-249-244-11	CARBON 27K 5% 1/3W	
R509	1-259-175-11	CARBON 2.2K 5% 1/4W	
R510	1-259-183-11	CARBON 4.7K 5% 1/4W	
⚠R511	1-249-899-11	CARBON 100 5% 1/4W	F
R512	1-259-171-21	CARBON 1.5K 5% 1/4W	
R513	1-259-167-21	CARBON 1K 5% 1/4W	
R514	1-249-258-11	CARBON 100K 5% 1/3W	
R515	1-259-143-21	CARBON 100 5% 1/4W	
R516	1-249-204-11	CARBON 560 5% 1/3W	
⚠R517	1-247-688-11	CARBON 10 5% 1/4W	F
⚠R518	1-247-688-11	CARBON 10 5% 1/4W	F
⚠R519	1-247-745-11	CARBON 330 5% 1/2W	F
⚠R520	1-249-899-11	CARBON 100 5% 1/4W	F
⚠R521	1-249-899-11	CARBON 100 5% 1/4W	F
⚠R522	1-208-601-11	REGISTER 0.1 10% 2W	F
⚠R523	1-208-601-11	REGISTER 0.1 10% 2W	F
R524	1-259-436-11	CARBON 2.2K 5% 1/6W	
R525	1-259-432-11	CARBON 1.5K 5% 1/6W	
R526	1-249-162-11	CARBON 10 5% 1/3W	
R527	1-259-484-11	CARBON 220K 5% 1/6W	
R600	1-259-167-21	CARBON 1K 5% 1/4W	
R601	1-259-215-21	CARBON 100K 5% 1/4W	
R602	1-259-151-21	CARBON 220 5% 1/4W	
R603	1-259-151-21	CARBON 220 5% 1/4W	
R604	1-259-151-21	CARBON 220 5% 1/4W	
R605	1-259-179-21	CARBON 3.3K 5% 1/4W	
R606	1-259-151-21	CARBON 220 5% 1/4W	
R607	1-259-151-21	CARBON 220 5% 1/4W	
R608	1-249-244-11	CARBON 27K 5% 1/3W	
R609	1-259-175-11	CARBON 2.2K 5% 1/4W	
R610	1-259-183-11	CARBON 4.7K 5% 1/4W	
⚠R611	1-249-899-11	CARBON 100 5% 1/4W	F
R612	1-259-171-21	CARBON 1.5K 5% 1/4W	
R613	1-259-167-21	CARBON 1K 5% 1/4W	
R614	1-249-258-11	CARBON 100K 5% 1/3W	
R615	1-259-143-21	CARBON 100 5% 1/4W	
R616	1-249-204-11	CARBON 560 5% 1/3W	
⚠R617	1-247-688-11	CARBON 10 5% 1/4W	F
⚠R618	1-247-688-11	CARBON 10 5% 1/4W	F
⚠R619	1-247-745-11	CARBON 330 5% 1/2W	F
⚠R620	1-249-899-11	CARBON 100 5% 1/4W	F
⚠R621	1-249-899-11	CARBON 100 5% 1/4W	F
⚠R622	1-208-601-11	REGISTER 0.1 10% 2W	F
⚠R623	1-208-601-11	REGISTER 0.1 10% 2W	F
R624	1-259-436-11	CARBON 2.2K 5% 1/6W	
R625	1-259-432-11	CARBON 1.5K 5% 1/6W	
R626	1-249-162-11	CARBON 10 5% 1/3W	
R627	1-259-484-11	CARBON 220K 5% 1/6W	
R709	1-249-425-11	CARBON 4.7K 5% 1/4W	F

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description				Remark
		< VARIABLE RESISTOR >				
RV500	1-241-762-11	RES, ADJ, CARBON 2.2K				
RV600	1-241-762-11	RES, ADJ, CARBON 2.2K				
**********						
*	1-669-476-11	OUTLET BOARD				
		**********				
		< CONNECTOR >				
⚠CNJ3	1-526-794-11	OUTLET, AC (AC OUTLET)				
⚠CNJ4	1-526-794-11	OUTLET, AC (AC OUTLET)				
		< FUSE >				
⚠F2	1-532-464-51	FUSE, TIME LAG (T2.5AL 250V)				
		< FUSE HOLDER >				
FH3	1-533-233-11	HOLDER, FUSE				
FH4	1-533-233-11	HOLDER, FUSE				
**********						
*	A-4407-623-A	PANEL BOARD, COMPLETE (FB720R)				
		**********				
*	A-4407-632-A	PANEL BOARD, COMPLETE (FB820R)				
		**********				
		< CAPACITOR >				
C300	1-136-171-00	FILM	0.33uF	5%	50V	
C301	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C302	1-136-153-00	FILM	0.01uF	5%	50V	
C303	1-136-155-00	FILM	0.015uF	5%	50V	
C304	1-136-165-00	FILM	0.1uF	5%	50V	
C305	1-136-165-00	FILM	0.1uF	5%	50V	
C306	1-130-471-00	MYLAR	0.001uF	5%	50V	
C400	1-136-171-00	FILM	0.33uF	5%	50V	
C401	1-130-475-00	MYLAR	0.0022uF	5%	50V	
C402	1-136-153-00	FILM	0.01uF	5%	50V	
C403	1-136-155-00	FILM	0.015uF	5%	50V	
C404	1-136-165-00	FILM	0.1uF	5%	50V	
C405	1-136-165-00	FILM	0.1uF	5%	50V	
C406	1-130-471-00	MYLAR	0.001uF	5%	50V	
C900	1-126-786-11	ELECT	47uF	20%	16V	
C901	1-126-916-11	ELECT	1000uF	20%	6.3V	
C902	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C903	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C904	1-164-159-11	CERAMIC	0.1uF		50V	
C905	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C906	1-126-795-11	ELECT	10uF	20%	50V	
C907	1-162-294-31	CERAMIC	0.001uF	10%	50V	
C908	1-126-786-11	ELECT	47uF	20%	16V	
C909	1-126-795-11	ELECT	10uF	20%	50V	
C910	1-126-794-11	ELECT	4.7uF	20%	50V	
C911	1-126-795-11	ELECT	10uF	20%	50V	
C912	1-126-786-11	ELECT	47uF	20%	16V	

Ref. No.	Part No.	Description				Remark
		< CONNECTOR >				
* CN300	1-564-522-11	PLUG, CONNECTOR 7P				
* CN301	1-564-526-11	PLUG, CONNECTOR 11P				
CN901	1-691-763-51	PIN, CONNECTOR 8P				
* CN904	1-564-525-11	PLUG, CONNECTOR 10P				
* CN905	1-564-522-11	PLUG, CONNECTOR 7P				
* CN906	1-564-520-11	PLUG, CONNECTOR 5P				
		< DIODE >				
D902	8-719-313-50	DIODE SEL6810A-TH12 (PHONO)				
D903	8-719-313-50	DIODE SEL6810A-TH12 (TUNER)				
D904	8-719-313-50	DIODE SEL6810A-TH12 (CD)				
D905	8-719-313-50	DIODE SEL6810A-TH12 (AUX)				
D906	8-719-313-50	DIODE SEL6810A-TH12 (TAPE2/MD)				
D907	8-719-313-50	DIODE SEL6810A-TH12 (TAPE1/DAT)				
D908	8-719-313-50	DIODE SEL6810A-TH12 (SOURCE DIRECT)				
D910	8-719-911-19	DIODE 1SS119-25				
D912	8-719-911-19	DIODE 1SS119-25				
D913	8-719-911-19	DIODE 1SS119-25				
D914	8-719-911-19	DIODE 1SS119-25				
D915	8-719-911-19	DIODE 1SS119-25				
D916	8-719-024-99	DIODE 11ES2-NTA2B				
D917	8-719-911-19	DIODE 1SS119-25				
D918	8-719-985-66	DIODE HZS5BLL-TA				
D919	8-719-911-19	DIODE 1SS119-25				
D920	8-719-911-19	DIODE 1SS119-25				
D921	8-719-911-19	DIODE 1SS119-25				
D922	8-719-911-19	DIODE 1SS119-25				
D923	8-719-911-19	DIODE 1SS119-25				
D924	8-719-911-19	DIODE 1SS119-25				
		< IC >				
IC901	8-759-962-08	IC BA6208				
IC902	8-759-392-41	IC TMP47C103N-JP47				
		< TRANSISTOR >				
Q900	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q901	8-729-900-63	TRANSISTOR DTA124ES				
Q902	8-729-900-63	TRANSISTOR DTA124ES				
Q903	8-729-900-80	TRANSISTOR DTC114ES				
Q905	8-729-422-57	TRANSISTOR UN4111				
Q906	8-729-900-80	TRANSISTOR DTC114ES				
Q907	8-729-119-78	TRANSISTOR 2SC2785-HFE				
Q908	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q909	8-729-620-05	TRANSISTOR 2SC2603-EF				
Q910	8-729-422-57	TRANSISTOR UN4111				
Q911	8-729-201-53	TRANSISTOR 2SA1015-GR				
Q912	8-729-422-57	TRANSISTOR UN4111 (FB820R)				
Q913	8-729-900-80	TRANSISTOR DTC114ES (FB820R)				
Q914	8-729-119-76	TRANSISTOR 2SA1175-HFE				
Q915	8-729-620-05	TRANSISTOR 2SC2603-EF				
		< RESISTOR >				
R300	1-259-500-11	CARBON	1M	5%	1/6W	
R301	1-259-500-11	CARBON	1M	5%	1/6W	
R302	1-259-446-11	CARBON	5.6K	5%	1/6W	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

PANEL **PHONO**

Ref. No.	Part No.	Description			Remark
R303	1-259-436-11	CARBON	2.2K	5%	1/6W
R304	1-259-500-11	CARBON	1M	5%	1/6W
R305	1-259-464-11	CARBON	33K	5%	1/6W
R306	1-259-456-11	CARBON	15K	5%	1/6W
R307	1-259-446-11	CARBON	5.6K	5%	1/6W
R308	1-259-456-11	CARBON	15K	5%	1/6W
R309	1-259-500-11	CARBON	1M	5%	1/6W
R310	1-259-464-11	CARBON	33K	5%	1/6W
R311	1-259-446-11	CARBON	5.6K	5%	1/6W
R391	1-249-421-11	CARBON	1K	5%	1/4W F
R392	1-249-421-11	CARBON	1K	5%	1/4W F
R393	1-249-421-11	CARBON	1K	5%	1/4W F
R400	1-259-500-11	CARBON	1M	5%	1/6W
R401	1-259-500-11	CARBON	1M	5%	1/6W
R402	1-259-446-11	CARBON	5.6K	5%	1/6W
R403	1-259-436-11	CARBON	2.2K	5%	1/6W
R404	1-259-500-11	CARBON	1M	5%	1/6W
R405	1-259-464-11	CARBON	33K	5%	1/6W
R406	1-259-456-11	CARBON	15K	5%	1/6W
R407	1-259-446-11	CARBON	5.6K	5%	1/6W
R408	1-259-456-11	CARBON	15K	5%	1/6W
R409	1-259-500-11	CARBON	1M	5%	1/6W
R410	1-259-464-11	CARBON	33K	5%	1/6W
R411	1-259-446-11	CARBON	5.6K	5%	1/6W
R902	1-247-239-00	CARBON	910	5%	1/2W
R905	1-249-429-11	CARBON	10K	5%	1/4W
R906	1-249-429-11	CARBON	10K	5%	1/4W
R907	1-249-429-11	CARBON	10K	5%	1/4W
R908	1-249-437-11	CARBON	47K	5%	1/4W
R909	1-249-429-11	CARBON	10K	5%	1/4W
R910	1-249-401-11	CARBON	47	5%	1/4W F
R911	1-249-411-11	CARBON	330	5%	1/4W
R912	1-249-429-11	CARBON	10K	5%	1/4W
R913	1-249-425-11	CARBON	4.7K	5%	1/4W F
R914	1-247-807-31	CARBON	100	5%	1/4W
R917	1-249-433-11	CARBON	22K	5%	1/4W
R918	1-249-421-11	CARBON	2.2K	5%	1/4W F
R919	1-249-421-11	CARBON	2.2K	5%	1/4W F
R920	1-249-429-11	CARBON	10K	5%	1/4W
R921	1-249-429-11	CARBON	10K	5%	1/4W
R922	1-249-429-11	CARBON	10K	5%	1/4W
R923	1-249-429-11	CARBON	10K	5%	1/4W
R924	1-249-429-11	CARBON	10K	5%	1/4W
R925	1-249-406-11	CARBON	120	5%	1/4W F
R927	1-249-403-11	CARBON	68	5%	1/4W F
R929	1-247-903-00	CARBON	1M	5%	1/4W
R930	1-247-807-31	CARBON	100	5%	1/4W
R931	1-249-419-11	CARBON	1.5K	5%	1/4W F
R932	1-249-427-11	CARBON	6.8K	5%	1/4W F
R933	1-247-239-00	CARBON	910	5%	1/2W (FB720R)
R934	1-247-843-11	CARBON	3.3K	5%	1/4W
R935	1-247-843-11	CARBON	3.3K	5%	1/4W
R936	1-249-429-11	CARBON	10K	5%	1/4W
R937	1-249-429-11	CARBON	10K	5%	1/4W
R938	1-249-429-11	CARBON	10K	5%	1/4W
R939	1-247-751-11	CARBON	820	5%	1/2W (FB720R)

Ref. No.	Part No.	Description			Remark
R939	1-247-752-11	CARBON	1K	5%	1/2W (FB820R)
		< VARIABLE RESISTOR >			
RV301	1-223-789-11	RES, VAR, CARBON 250K/250K (BALANCE)			
RV302	1-223-768-11	RES, VAR, CARBON 250K/250K (TONE TREBLE)			
RV303	1-223-767-11	RES, VAR, CARBON 900K/900K (TONE BASS)			
		< SWITCH >			
S301	1-762-203-11	SWITCH, PUSH (1 KEY)(SUBSONIC)			
S302	1-762-393-11	SWITCH, PUSH (SOURCE DIRECT)			
S303	1-762-387-11	SWITCH, PUSH (LOUDNESS)			
S902	1-692-974-11	SWITCH, ROTARY (INPUT SELECTOR)			
S903	1-771-386-11	SWITCH, ROTARY (TAPE MONITOR)			
		< VIBRATOR >			
X900	1-577-358-21	VIBRATOR, CERAMIC (4.0MHz)			
**********					
*	A-4407-621-A	PHONO BOARD, COMPLETE (FB720R)			
		**********			
*	A-4407-640-A	PHONO BOARD, COMPLETE (FB820R)			
		**********			
		< CAPACITOR >			
C150	1-102-978-00	CERAMIC	220PF	5%	50V
C151	1-126-048-11	ELECT	10uF	20%	50V
C152	1-101-880-00	CERAMIC	47PF	5%	50V
C153	1-106-359-00	MYLAR	4700PF	5%	200V
C154	1-126-023-11	ELECT	100uF	20%	25V
C155	1-136-162-00	FILM	0.056uF	5%	50V
C156	1-137-471-11	FILM	0.016uF	5%	50V
C157	1-126-048-11	ELECT	10uF	20%	50V
C170	1-126-023-11	ELECT	100uF	20%	25V
C171	1-136-165-00	FILM	0.1uF	5%	50V
C172	1-136-165-00	FILM	0.1uF	5%	50V
C250	1-102-978-00	CERAMIC	220PF	5%	50V
C251	1-126-048-11	ELECT	10uF	20%	50V
C252	1-101-880-00	CERAMIC	47PF	5%	50V
C253	1-106-359-00	MYLAR	4700PF	5%	200V
C254	1-126-023-11	ELECT	100uF	20%	25V
C255	1-136-162-00	FILM	0.056uF	5%	50V
C256	1-137-471-11	FILM	0.016uF	5%	50V
C257	1-126-048-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
CN151	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
		< DIODE >			
D170	8-719-985-97	DIODE HZS7B1LTA			
		< IC >			
IC150	8-759-636-74	IC M5218AP-22 (FB720R)			
IC150	8-759-701-25	IC NJM2068D-D (FB820R)			

Ref. No.	Part No.	Description			Remark
		< JACK >			
J150	1-764-593-21	JACK 2P (PHONO IN)			
		< COIL >			
L150	1-410-977-11	INDUCTOR 100uH			
L151	1-410-977-11	INDUCTOR 100uH			
L250	1-410-977-11	INDUCTOR 100uH			
L251	1-410-977-11	INDUCTOR 100uH			
		< TRANSISTOR >			
Q150	8-729-354-52	TRANSISTOR 2SC2545			
Q151	8-729-354-52	TRANSISTOR 2SC2545			
Q250	8-729-354-52	TRANSISTOR 2SC2545			
Q251	8-729-354-52	TRANSISTOR 2SC2545			
		< RESISTOR >			
R150	1-259-175-11	CARBON	2.2K	5%	1/4W
R151	1-249-911-11	CARBON	330	5%	1/4W
R152	1-259-215-21	CARBON	100K	5%	1/4W
R153	1-259-215-21	CARBON	100K	5%	1/4W
R154	1-259-161-21	CARBON	560	5%	1/4W
R155	1-259-161-21	CARBON	560	5%	1/4W
R156	1-259-143-21	CARBON	100	5%	1/4W
R157	1-259-191-21	CARBON	10K	5%	1/4W
R158	1-259-144-11	CARBON	110	5%	1/4W
R159	1-259-209-11	CARBON	56K	1%	1/4W (FB720R)
R159	1-259-346-81	CARBON	56K	1%	1/2W (FB820R)
R160	1-259-183-11	CARBON	4.7K	1%	1/4W (FB720R)
R160	1-259-320-11	CARBON	4.7K	1%	1/2W (FB820R)
R161	1-259-239-11	CARBON	1M	5%	1/4W
R162	1-259-167-21	CARBON	1K	5%	1/4W
R170	1-259-171-21	CARBON	1.5K	5%	1/4W
R250	1-259-175-11	CARBON	2.2K	5%	1/4W
R251	1-249-911-11	CARBON	330	5%	1/4W
R252	1-259-215-21	CARBON	100K	5%	1/4W
R253	1-259-215-21	CARBON	100K	5%	1/4W
R254	1-259-161-21	CARBON	560	5%	1/4W
R255	1-259-161-21	CARBON	560	5%	1/4W
R256	1-259-143-21	CARBON	100	5%	1/4W
R257	1-259-191-21	CARBON	10K	5%	1/4W
R258	1-259-144-11	CARBON	110	5%	1/4W
R259	1-259-209-11	CARBON	56K	1%	1/4W (FB720R)
R259	1-259-346-81	CARBON	56K	1%	1/2W (FB820R)
R260	1-259-183-11	CARBON	4.7K	1%	1/4W (FB720R)
R260	1-259-320-11	CARBON	4.7K	1%	1/2W (FB820R)
R261	1-259-239-11	CARBON	1M	5%	1/4W
R262	1-259-167-21	CARBON	1K	5%	1/4W

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Ref. No.	Part No.	Description			Remark
*	1-669-473-11	PS BOARD			
		********			
		< CAPACITOR >			
C750	1-125-819-11	ELECT	6800uF		50V (FB720R)
C750	1-125-820-11	ELECT	8200uF		50V (FB820R)
C751	1-125-819-11	ELECT	6800uF		50V (FB720R)
C751	1-125-820-11	ELECT	8200uF		50V (FB820R)
C754	1-137-398-11	FILM	0.068uF	5%	100V
C755	1-137-398-11	FILM	0.068uF	5%	100V
		< CONNECTOR >			
CN1	1-774-108-11	PIN, CONNECTOR (PC BOARD)			
CN2	1-564-321-00	PIN, CONNECTOR 2P			
CN3	1-564-321-00	PIN, CONNECTOR 2P			
* CN4	1-564-321-21	PIN, CONNECTOR 2P			
* CN750	1-564-687-11	PIN, CONNECTOR 3P			
* CN751	1-766-920-11	PIN, CONNECTOR 4P			
CN752	1-770-832-11	CONNECTOR, BOARD TO BOARD 6P			
		< DIODE >			
D750	8-719-302-38	DIODE RBV-602-01			
		< FUSE >			
⚠F1	1-532-388-51	FUSE, TIME LAG (T2.0AL 250V)(FB720R)			
⚠F1	1-532-465-51	FUSE, TIME LAG (T3.15AL 250V)(FB820R)			
		< FUSE HOLDER >			
FH1	1-533-233-11	HOLDER, FUSE			
FH2	1-533-233-11	HOLDER, FUSE			

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*	1-669-497-11	SIRCS BOARD			
		**********			
		< CONNECTOR >			
* CN911	1-560-666-00	PIN, CONNECTOR 3P			
		< DIODE >			
D900	8-719-046-46	DIODE SEL5221S-TH8F (PROTECTION)			
D901	8-719-046-38	DIODE SEL5821A-TH8F (EON LINK)			
		< RESISTOR >			
R900	1-249-409-11	CARBON	220	5%	1/4W F
R901	1-249-403-11	CARBON	68	5%	1/4W F
R904	1-249-429-11	CARBON	10K	5%	1/4W
		< SWITCH >			
S901	1-571-112-21	SWITCH, PUSH (1 KEY)(EON LINK)			

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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

SIRCS SUB | SP-SW | SP-TM

Ref. No.	Part No.	Description			Remark
*	1-670-220-11	SIRCS SUB BOARD			
		**********			
		< CONNECTOR >			
* CN912	1-565-835-11	SOCKET, CONNECTOR 3P			
		< IC >			
IC900	8-749-014-66	IC NJL64H400A			
**********					
*	1-669-494-11	SP-SW BOARD			
		**********			
		< RESISTOR >			
R801	1-247-751-11	CARBON	820	5%	1/2W
R802	1-247-751-11	CARBON	820	5%	1/2W
R803	1-247-751-11	CARBON	820	5%	1/2W
R804	1-247-751-11	CARBON	820	5%	1/2W
R805	1-247-751-11	CARBON	820	5%	1/2W
R806	1-247-751-11	CARBON	820	5%	1/2W
R807	1-247-231-00	CARBON	430	5%	1/2W (FB820R)
R807	1-247-746-11	CARBON	390	5%	1/2W F (FB720R)
R808	1-247-231-00	CARBON	430	5%	1/2W (FB820R)
R808	1-247-746-11	CARBON	390	5%	1/2W F (FB720R)
R809	1-247-231-00	CARBON	430	5%	1/2W (FB820R)
R809	1-247-746-11	CARBON	390	5%	1/2W F (FB720R)
R810	1-247-231-00	CARBON	430	5%	1/2W (FB820R)
R810	1-247-746-11	CARBON	390	5%	1/2W F (FB720R)
		< SWITCH >			
S801	1-771-385-11	SWITCH, ROTARY (SPEAKERS)			
**********					
*	A-4407-619-A	SP-TM BOARD, COMPLETE (FB720R)			
		**********			
*	A-4407-638-A	SP-TM BOARD, COMPLETE (FB820R)			
		**********			
		< CAPACITOR >			
C515	1-101-880-00	CERAMIC	100P	5%	50V
C516	1-101-880-00	CERAMIC	100P	5%	50V
C615	1-101-880-00	CERAMIC	100P	5%	50V
C616	1-101-880-00	CERAMIC	100P	5%	50V
C700	1-126-965-11	ELECT	22uF	20%	50V
C701	1-136-163-00	FILM	0.068uF	5%	50V
C702	1-124-995-11	ELECT	220uF	20%	10V
C703	1-136-157-00	FILM	0.022uF	5%	50V
C704	1-126-967-11	ELECT	47uF	20%	16V
C705	1-126-967-11	ELECT	47uF	20%	16V

Ref. No.	Part No.	Description			Remark
C706	1-137-150-11	MYLAR	0.01uF	10%	100V
C707	1-137-150-11	MYLAR	0.01uF	10%	100V
C708	1-128-578-11	ELECT	1uF	20%	100V
C709	1-126-972-11	ELECT	1000uF	20%	50V
C710	1-126-969-11	ELECT	220uF	20%	50V
C711	1-126-964-11	ELECT	10uF	20%	50V
C715	1-164-159-11	CERAMIC	0.1uF		50V
		< CONNECTOR >			
CN702	1-770-831-11	CONNECTOR, BOARD TO BOARD 6P			
CN703	1-566-212-11	PIN, CONNECTOR 3P (EON CONTROL)			
		< DIODE >			
D511	8-719-911-19	DIODE 1SS119-25			
D512	8-719-911-19	DIODE 1SS119-25			
D513	8-719-911-19	DIODE 1SS119-25			
D700	8-719-024-99	DIODE 11ES2-NTA2B			
D701	8-719-024-99	DIODE 11ES2-NTA2B			
D702	8-719-024-99	DIODE 11ES2-NTA2B			
		< IC >			
IC700	8-759-111-68	IC UPC1237HA			
		< COIL >			
L501	1-411-906-11	COIL, AIR-CORE			
L601	1-411-906-11	COIL, AIR-CORE			
		< TRANSISTOR >			
Q700	8-729-119-76	TRANSISTOR 2SA1175-HFE			
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE			
		< RESISTOR >			
R528	1-249-162-11	CARBON	10	5%	1/3W
R529	1-249-206-11	CARBON	680	5%	1/3W
⚠R530	1-212-857-00	FUSIBLE	10	5%	1/4W
⚠R531	1-212-857-00	FUSIBLE	10	5%	1/4W
R628	1-249-162-11	CARBON	10	5%	1/3W
R629	1-249-206-11	CARBON	680	5%	1/3W
⚠R630	1-212-857-00	FUSIBLE	10	5%	1/4W
⚠R631	1-212-857-00	FUSIBLE	10	5%	1/4W
R700	1-249-431-11	CARBON	15K	5%	1/4W (FB720R)
R700	1-249-434-11	CARBON	27K	5%	1/4W (FB820R)
R701	1-249-429-11	CARBON	10K	5%	1/4W
R702	1-249-429-11	CARBON	10K	5%	1/4W
R703	1-259-476-11	CARBON	100K	5%	1/6W
R704	1-249-433-11	CARBON	22K	5%	1/4W
R705	1-247-883-00	CARBON	150K	5%	1/4W
R706	1-249-431-11	CARBON	15K	5%	1/4W
R707	1-249-429-11	CARBON	10K	5%	1/4W
R710	1-247-231-00	CARBON	430	5%	1/2W (FB820R)
R710	1-247-746-11	CARBON	390	5%	1/2W F (FB720R)
R711	1-247-231-00	CARBON	430	5%	1/2W (FB820R)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Ref. No.	Part No.	Description			Remark
R711	1-247-746-11	CARBON	390	5%	1/2W F (FB720R)
		< RELAY >			
RY501	1-515-921-11	RELAY (12V)			
RY502	1-515-921-11	RELAY (12V)			
RY503	1-515-920-11	RELAY (24V)			
		< TERMINAL >			
* TM501	1-537-699-11	TERMINAL BOARD (SP)(SPEAKERS)			
**********					
*	1-669-496-11	VOL BOARD *********			
		< CAPACITOR >			
C310	1-136-165-00	FILM	0.1uF	5%	50V
		< CONNECTOR >			
CN302	1-691-772-11	PLUG (MICRO CONNECTOR) 10P			
CN303	1-691-768-11	PLUG (MICRO CONNECTOR) 6P			
		< TRANSISTOR >			
Q300	8-729-141-26	TRANSISTOR 2SC3622A-LK			
Q400	8-729-141-26	TRANSISTOR 2SC3622A-LK			
		< RESISTOR >			
R312	1-259-448-11	CARBON	6.8K	5%	1/6W
R412	1-259-448-11	CARBON	6.8K	5%	1/6W
		< VARIABLE RESISTOR >			
RV300	1-225-227-11	RES, VAR, CARBON 120K/120K (VOLUME)			
**********					
		MISCELLANEOUS **********			
⚠11	1-777-185-11	CORD, POWER			
⚠CNJ3	1-526-794-11	OUTLET, AC			
⚠CNJ4	1-526-794-11	OUTLET, AC			
Q511	8-729-232-45	TRANSISTOR 2SK1529-Y			
Q512	8-729-232-46	TRANSISTOR 2SJ200-Y			
Q611	8-729-232-45	TRANSISTOR 2SK1529-Y			
Q612	8-729-232-46	TRANSISTOR 2SJ200-Y			
Q702	8-729-209-15	TRANSISTOR 2SD2012			
⚠S1	1-554-920-61	SWITCH, PUSH (AC POWER)(1 KEY)(ⓘ)			
⚠T1	1-431-870-11	TRANSFORMER, POWER (FB720R)			
⚠T1	1-431-872-11	TRANSFORMER, POWER (FB820R)			
**********					
		ACCESSORIES & PACKING MATERIALS **********			
	1-473-656-11	REMOTE COMMANDER (RM-S316)			
	3-864-335-11	MANUAL, INSTRUCTION (ENGLISH,FRENCH,SPANISH,PORTUGUESE)			
	3-864-335-21	MANUAL, INSTRUCTION (GERMAN,DUTCH,SWEDISH,ITALIAN)			
	4-981-643-01	COVER, BATTERY (FOR RM-S316)			
**********					
		********** HARDWARE LIST **********			
#1	7-682-548-09	SCREW (3X8)			
#2	7-685-885-09	SCREW +BVTT 4X16 (S)			

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

9-922-867-11

Sony Corporation
Home A&V Products Company

98E097541-1
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Published by Quality Assurance Dept.
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